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Original Research Article

Knowledge, Attitude, Practice with respect to Epilepsy in final year M.B.B.S. medical students

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ABSTRACT

Background: Epilepsy is a common chronic neurological disorder affecting children as well as adults. It is associated with misconceptions, myths and social stigma. Patient, parents, family members, school teachers, medical professionals look at this disorder with different perspective. Knowledge, Attitude and Practice (KAP) regarding epilepsy has been studied in various segments of population. Not many studies are available in medical students. Also, there are going to be regional variations with respect to KAP regarding epilepsy. Such study is not done in this region. Hence, this study was planned.

Materials and Methods: Descriptive cross-sectional study was under taken in 102 final year M.B.B.S. students. Self-administered questionnaire was used for data collection.

Result: 51% students answered correctly in knowledge domain, 69% answered in attitude domain and 58% answered correctly in practice domain. Only 21% students were exposed in management of epilepsy patient. 86-87% students expressed to include epilepsy topic should be included in undergraduate syllabus and need for clinical posting of final year students in emergency department.

Conclusion: Final year medical students had better attitude towards epilepsy but had average knowledge and practices about epilepsy.

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1. Introduction

Epilepsy is a common paroxysmal and chronic seizure disorder affecting children as well as adults which is associated with misconceptions, myths, burden and social stigma.¹ Studies done in various groups of population in many countries all over the world, especially in developing countries have uniformly stressed the need for improvement in Knowledge, Attitude and Practice (KAP) regarding epilepsy.²⁻¹⁴ KAP regarding epilepsy is expected

to vary depending upon regional variations in awareness, understanding and cultural beliefs. Earlier many studies regarding KAP related to epilepsy are done in different segments of society like school teachers, higher school children, pharmacy students, dental students, health staff and general population. However only few studies are present amongst medical students.^{9,10,12-19} Undergraduate medical students frequently come across epilepsy patient during their clinical postings in hospital. They may also come across such cases during their casualty postings. They may be first medical person to attend these cases and communicate with relatives. It is expected that they

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should have basic knowledge about nature of the disease, primary care to be given and answer queries of the relatives. Such type of study has not been conducted in our area. Hence to know KAP regarding epilepsy in final year M.B.B.S. medical students, this study was conducted. If medical students, who are expected as future competent physicians; when adequately oriented to this important medical problem, will be able to handle epilepsy cases and their relatives in a better way. Their expectations regarding improvement of KAP about epilepsy are also considered. Corrective measures in this regard may help them in better understanding of epilepsy disorder.

2. Materials and Methods

2.1. Study population

102 M.B.B.S. part II final year (9th semester) students from Dr. D.Y. Patil Medical College, Kolhapur, Maharashtra state, India.

2.2. Study design

Descriptive cross-sectional study.

2.3. Operational definitions

Scientific facts were assessed in knowledge area. Personal views of the participant towards epilepsy were assessed under attitude area. Minimum skills required in initial management of epilepsy case were assessed under practice area.

2.4. Sampling procedure

All the students at present studying in 9th semester, willing to participate in the study voluntarily were included in the study.

2.5. Sample size

Out of 150 students currently enrolled in 9th semester, willing students and students present on scheduled day; 102 students were enrolled for study after their verbal consent. Equal number of boys and girls participated in study.

2.6. Data collection

It was self administered questionnaire based data collection. Questionnaire had 34 questions related to information about knowledge (14), attitude (10) and practice (10) about epilepsy. A pre validated questionnaire used in earlier studies was used.^{2,7,9,11,15} A scoring system was devised to quantify the knowledge and practices of students.

2.7. Analysis plan

Data was analyzed with MS Excel worksheet. Results were expressed in terms of percentage and proportions.

2.8. Ethical issues

Participant students were explained about nature of the study. With their voluntary verbal consent they were included in the study. Confidentiality of participants was assured. The study was approved by Institutional Research Committee.

3. Results

Overall correct answers in knowledge domain were 51%. Majority of the students have read or heard about epilepsy (76%). They were correct in answering about nature of the disease, age of occurrence, familial occurrence, and abnormality in electrical discharges. However, they were not able to answer about clinical presentation and treatment part of epilepsy. 87% students considered epilepsy as infectious and contagious, 80% considered it as disorder that can't be controlled and cured and 61% thought that children with epilepsy require special class placement. Table 1

Majority of students showed positive attitude in attitude domain regarding children with epilepsy (69%). However, 92% students answered that children with epilepsy should not work. Table 2

58% students answered correctly to the questions asked in Practice regarding epilepsy domain. More than half 52% students were not involved anytime in first aid seizure management. However, 50-75 % students had fair theoretical information regarding management of acute seizure episode. Table 3

25% students answered that they didn't receive training or orientation to epilepsy or management of epilepsy. 88-92% students suggested to include epilepsy topic in undergraduate syllabus and need to post final year students in emergency department in evening hours after completing their routine schedule. Table 4

4. Discussion

Epilepsy is a common paroxysmal and chronic seizure disorder affecting children as well as adults which is associated with misconceptions, myths and social stigma. These misconceptions, myths and social stigma lead to negative attitude towards epilepsy. Knowledge, Attitude and Practice towards medical problem of epilepsy has been studied at many places all over the world. There are regional variations depending upon level of literacy, cultural beliefs and practices. It has been studied amongst different segments of society like epilepsy patients, their family members, general population, school teachers, high school students, medical and paramedical students. Majority

Table 1:

S.No.	Section A – Knowledge of Epilepsy	Correct answer	Yes%	No%	Don't know %
1	Have you heard/ read about epilepsy?	Yes	76	24	0
2	Is epilepsy a mental illness?	No	59	37	4
3	Is epilepsy known to occur in family?	Yes	79	16	5
4	Epilepsy is an infectious disease and contagious	No	87	6	7
5	People with epilepsy have lower intelligence than other people	No	66	26	8
6	Can epilepsy be cured or controlled?	Yes	19	80	1
7	Do all epileptic patients need lifelong treatment?	No	20	72	8
8	Whether drugs used in epilepsy have many side effects.	No	74	25	1
9	An epileptic person should not miss even a single tablet?	Yes	38	51	11
10	Children with epilepsy require special classroom	No	61	25	14
11	Epilepsy is recurrent abnormal electrical discharge in the brain	Yes	61	22	17
12	Can epilepsy present as staring spell with sudden, transient loss of awareness	Yes	22	66	12
13	Can epilepsy occur at any age	Yes	71	21	8
14	Epilepsy is a disorder of the brain	Yes	84	8	8

Table 2:

S.No.	Section B- Attitude about Epilepsy	Correct answer	Yes %	No %	Don't know %
1	It is possible for a person with epilepsy to get married	Yes	89	8	3
2	Can a person with epilepsy will be able to have children	Yes	90	6	4
3	A person with epilepsy should not study	No	23	76	1
4	A person with epilepsy should not work.	No	92	7	1
5	Society should behave differently with a person with epilepsy.	No	8	91	1
6	Can a child with epilepsy participate in games	Yes	69	24	7
7	Can people with epilepsy swim and drive safely	Yes	51	37	12
8	People with epilepsy have lower intelligence than other people	No	20	69	11
9	People with epilepsy are insane	No	8	86	6
10	Epilepsy affects education of a person	No	31	63	6

Table 3:

S. No.	Section C- Practice regarding Epilepsy	Correct answer	Yes %	No%	Don't know %
1	If you see a person with epileptic fit what will you do				
a	He should be taken to the hospital	Yes	70	8	22
b	Allow fit to run its own course	Yes	52	30	18
c	Loosen tight clothes	Yes	72	13	15
d	Introduce something in mouth to avoid tongue bite	Yes	79	13	8
e	Will give bunch of keys in hand or put some water on his face or put shoe or onion on his nose	No	30	47	23
f	Give an antiepileptic drug during the episode	No	43	37	20
g	Place the person in a semi-prone position to prevent choking	Yes	70	10	20
h	Restrain the person and perform chest compressions (CPR)	No	39	36	25
i	Prevent injury during the episode	Yes	77	10	13
j	Water should be sprinkled over the face of a person having seizures	No	40	38	22
2	Have you ever involved in first aid seizure management?		48	52	

Table 4:

S.No.	Section 4 – Students Expectation	Yes %	No %
1	Whether received any training / orientation session regarding what is epilepsy or first aid for child with seizures?	25	75
2	Do you think epilepsy topic should be more highlighted in competency based undergraduate medical curriculum.	88	12
3	Will emergency department posting regularly during clinical posting in evening hours will help you to improve your KAP about epilepsy	92	8

of the studies have observed inadequate KAP in study population.^{2–5,8,9,11–13,16,17} These studies have underlined need to make positive efforts to improve KAP towards epilepsy. There are only few studies done in medical students of this part of country. These students are directly or indirectly involved in management and counseling of epilepsy patients during their clinical posting as well as in emergency department posting. Sometimes they may be the first person to interact with relatives of the epilepsy patient. Hence it is expected from then to have adequate knowledge, attitude and practice towards epilepsy.^{12–14,16,17}

This study endorses the inadequacy in KAP regarding epilepsy in medical students which is observed in other studies done in India and outside. Overall correct answers in knowledge domain were 51%. Majority of the students have read or heard about epilepsy (76%). They answered about nature of the disease, age of occurrence, familial occurrence, and abnormality in electrical discharges correctly. They were not having correct concepts about clinical presentation and treatment part of epilepsy. Surprisingly 87% students considered epilepsy as infectious and contagious, 80% considered it as disorder that can't be controlled and cured and 61% thought that children with epilepsy require special class placement. Their knowledge domain needs to be strengthened. Our observation matches with similar observations found in studies done elsewhere.^{2,4,5,9,10,12,17,20}

Students did better in attitude domain. Majority of students showed positive attitude in attitude domain regarding children with epilepsy (69%). Surprisingly 92% students answered that children with epilepsy should not work. Probably they were confused between high risk work and relatively safe work.

Students were just above adequacy in practice domain. 58% students answered correctly to the questions asked in Practice regarding epilepsy management domain. More than half, 52% students were not involved anytime in first aid seizure management. Probably that was the reason why they didn't answer confidently to questions related to management of acute seizure attack. However, 50–75 % students had fair theoretical information regarding management of acute seizure episode. Similar observations were noted in other studies done in India and other countries.⁴

We asked students regarding possible interventions regarding improvement in KAP regarding. 25% students reported that they didn't receive training or orientation to epilepsy or management of epilepsy. 88–92% students expressed to include epilepsy topic should be included in undergraduate syllabus and need to post final year students in emergency department in evening hours after completing their routine schedule to be more familiar with KAP regarding epilepsy and management of acute episode of seizures. As undergraduate medical curriculum is switching over to competency-based curriculum, it will be worth to consider their suggestions to address KAP regarding epilepsy in better way. Similar suggestions are made in similar other studies.^{2,4,10,12–24}

5. Conclusions

Knowledge, Attitude and Practices of final year medical students showed 51% and 58% adequacy in knowledge and practice domain regarding epilepsy. They did better in attitude domain. There is need for adopting various teaching and learning methods for updating and improving their KAP regarding epilepsy.

6. Author's Contributors

MAP: designed the study, drafted manuscript and reviewed the literature.

SOK: Collected data. DAK: Collected data. Yamini S & Nagiseti Divyasri: compiled the data. MD: analyzed the data. All authors approved the final manuscript.

7. Conflict of Interest

The authors declare that they have no conflict of interest.

8. Funding of Source

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