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# **ORIGINAL ARTICLE**

# KNOWLEDGE, ATTITUDE AND PRACTICE OF EPILEPSY AMONG NURSING FACULTY AND STUDENTS IN A TERTIARY CARE CENTER IN RAJASTHAN

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**ABSTRACT: AIM:** To quantify knowledge, attitude and practice (KAP) toward epilepsy among Nursing students and faculties In India. **METHODS:** All participants completed the self-administered questionnaire after signing the consent to participate in the study. The questionnaire presented to the participants had questions related to knowledge on etiology and treatment, attitude in dealing with persons with epilepsy and familiarity with various forms of treatment and management. Possible differences in answers were analyzed among both the groups. **RESULTS:** Nursing GNM students (20%) had never heard about epilepsy. >55% of B.sc students in comparison to nursing faculty (approx. 15%) believed that epilepsy is a mental illness. Majority (60%) of the members of both the groups considered epilepsy as hindrance in life. Majority of the individual think that epilepsy is curable. 100% of the faculty had opinion that epilepsy can be treated with Allopathic medicine. **CONCLUSION:** Despite a great degree of awareness about epilepsy among students and teachers in India negative and wrong attitudes still exist. The present day education, therefore, does not seem to influence the prejudices against persons with epilepsy. Requirement of special education programme for teachers and students is felt to dispel myths and misconceptions about epilepsy.

**KEYWORDS:** Epilepsy, Knowledge, Attitude, Practice, Nursing.

**INTRODUCTION:** Epilepsy is a common neurological disorder that affects 1% of the population worldwide. It is indeed unfortunate that a common disease like epilepsy carries such strong stigma. The social attitude, the stigmata and the discrimination against epileptics are often more devastating and harmful that the disease itself. Community based studies have reported that better educated individuals know more and have less negative attitudes concerning epilepsy. [1-9] University students probably are the better educated sections of society. [10] In addition, health care students are expected to become professionals who will provide care to the patients with epilepsy, and are likely to be opinion formers in society. Thus, it is important that these future health care professionals be well informed about epilepsy and take an appropriate attitude towards the disease. The aim of this study was to access the level of knowledge and the attitudes on epilepsy amongst nursing faculty and students (GNM and BSc) which may help in planning awareness programme.

**MATERIAL AND METHODS:** The study was carried out in the department of neurology at Mahatma Gandhi medical college and hospital Jaipur. Nursing faculty (n=23) and nursing

students (n=211) out of which 133 belong to GNM and 78 belongs to B.Sc. course were included in the study. All participants completed the self-administered questionnaire after signing the consent to participate in the study. The questionnaire presented to the participants had questions related to knowledge on etiology and treatment, attitude in dealing with persons with epilepsy and familiarity with various forms of treatment and management. Most of the questions in the instrument have already been used by other researchers. Possible differences in answers were analyzed among both the groups.

**RESULTS:** Total 234individuals participated in the study out of which 23 were nursing faculty members and 211 were nursing student.

**Knowledge:** 100% of the nursing faculty had heard about epilepsy. This proportion was less among nursing students (91.02% in B.sc students and 69.9% among GNM students). Moreover, more than 20% of the sample knew someone with epilepsy. Concerning the causes of epilepsy more than 50% of the respondent's correlated epilepsy with brain disease, this proportion being highest in B.sc nursing students (71.79%). It was observed that 56.41% of the nursing B.sc students correlated epilepsy with mental disease. Both faculties and students considered hereditary etiology in 20% of the cases and both were convinced that disease is non-contagious. More than 50% of the subjects labeled loss of consciousness and convulsions as epilepsy. In this survey it came out that 4% of nursing faculty, 5% of B.Sc. students and 10% of GNM students were themselves suffering from epilepsy. Family history was present in more than 15% of individuals of both groups. Evil spirits and supernatural power as a cause was enumerated by 15% of the B.Sc. students. (Table-1)

**Attitude:** Majority (>60%) of the members considered epilepsy as hindrance in life. Around 14% of GNM students and 38% of B.Sc. students considered that epileptics committed sins in the past life in contrast to faculty who refuted the same. Nearly 35% of our students believed that persons with epilepsy could not lead a happy married life. Approximately 25% reported that people with epilepsy cannot work like others. Regarding first aid on seeing the epileptic attack 4.3% of nursing faculty and around 15% of students chose to put shoe/onion on the face and also put water in his/her mouth.(Table-2)

**Practice:** Majority of the participants thought that epilepsy is curable. Priest and tantric treatment would be considered for treating epilepsy by 13% of nursing faculty and 20-30% of nursing students. 100% of faculty had opinion that epilepsy could also be treated with Allopathic medicine. Ayurvedic and homeopathic medicines are also accepted by large segment of population. Around 50% of the individuals were of the opinion that epilepsy has many complications. If we talk about treatment compliance only 61.53% individuals have knowledge that patient shouldn't miss even a single dose. Around 50% of the participants were aware of the fact that epileptics do not need lifelong treatment. (Table-3)

#### **DISCUSSION:**

**Knowledge:** In our study majority of the respondents had heard about epilepsy. It shows that the awareness of epilepsy amongst faculty was comparatively higher than in students. 100% of the faculties had heard about epilepsy. The number of B.Sc. nursing students who had heard about or read about epilepsy(91.66%) is comparable with those reported among university students from Italy (96%),<sup>[11]</sup> Canada(91%)<sup>[12]</sup> and Brazil (91.3%)<sup>[2]</sup> and is higher than reported among Malaysian University students(86.5%).<sup>[13]</sup> 20% of GNM Nursing students had never heard about epilepsy. Source of the awareness of epilepsy was mainly from studies and through public media. In the study by FalavignaA et al.<sup>[10]</sup> it was observed that majority of students had heard about epilepsy at university. 56.41% of the B.Sc. students in comparison to nursing faculty (17.39%) believed that epilepsy is a mental illness. In the Malaysian study,<sup>[13]</sup> 39.7% of the undergraduate students stated that epilepsy is a form of mental illness. In the Italian study,<sup>[11]</sup> 45% of the university students considered that epilepsy is a psychiatric disease. This reflects the greater level of misconceptions and stigma associated with epilepsy. This is possibly because school level education is not able to correct this belief.

Attitude: Misconceptions about epilepsy are widely prevalent in developing regions. The negative attitude of the literate population is not much different from less literate population. Nearly 5% nursing population believed that epilepsy is contagious. Results from other studies also suggested that 1-14% persons believed that epilepsy is contagious. [14] Approximately 15% of GNM students and 40% of B.Sc. students think that epileptics have committed sins in their past life. In Malaysian study, [13] when asked if epilepsy is caused by evil spirits, 5.3% answered no and 20.1% did not know. More than 60% of the subjects reported that epilepsy created hindrance in normal life. Nearly 30% of our students believed that persons with epilepsy could not lead a happy married life. This attitude in our population may be related to their belief that epilepsy is a hereditary and mental illness. In a study by Deepak Goel et al. [15] large number of the students were of belief that a person with epilepsy should not marry (73.6%). The percentage of the respondents who objected their children playing/studying with a child with epilepsy were comparatively more among students (19%) than faculties (13%). Approximately 25% reported that people with epilepsy cannot work like others. This misconception is maximum among GNM students (36.84%). In study by K. Radhakrishnan et al. [8] the percentage of respondents who thought that epilepsy was a form of mental illness, who objected to their children playing with a child with epilepsy, and who objected to employing a person with epilepsy were 27%, 11% and 44% respectively, compared with 3%, 6% and 9% in the United States.[1] The mistaken belief of putting shoe/onion on his face, giving bunch of keys in hands or other practices has been observed in more than 10% of students(GNM and Bsc) in compared to faculty(<5%). In study by Falavingna A et al.[10] these mistaken ideas were observed in 38.8% of the sample. Another Brazilian study<sup>[2]</sup> demonstrated that 71% of the first year students of health care related disciplines and 32% of the last year students follow these practices. These data suggest that still there is lack of information about assistance and safe handling of a seizure in health care courses.

**Practice:** It is encouraging to note that large proportion of our respondents were aware of the optimal treatment practices concerning epilepsy. Most people in our study preferred the advice of allopath's, although ayurvedic and homeopathic medicines are also accepted by a large segment of population. >50% of all participants were aware of the fact that epileptics do not need lifelong treatment. In a study by Deepak Goel et al.[15] 72.5% students from Uttarakhand believed that person with epilepsy need lifelong therapy. Most Indians have an abiding faith in the indigenous Ayurvedic form of treatment. Another reason for popularity of Ayurvedic medicines is the easy accessibility to practitioners of the system, especially in rural India. More than 70% of our population believed that epilepsy can be cured. These results are better in comparison to study conducted by Kim et al. [6] on the positive trends in public attitudes towards epilepsy after a public education campaign among rural Koreans. We found out that more than 50% of the people believed that missing a dose of their antiepileptic drug would result in a fit. In our study in 2000,<sup>[16]</sup> majority of people believed that missing a dose would not cause any harm. The percentage of people who believed that Tantric treatment is good for epilepsy among nursing faculty was less (13.04%) compared to those among students (>20%). This result is better than a study on school teachers of Nigeria<sup>[17]</sup> where 51% of the teachers preferred spiritual healing and traditional treatment.

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SI. No.	Questions	Nursing faculty	Nursing students(n=211)	
		n=23	GNM	B.Sc.
		11-23	n=133	n=78
		Positive response		
1	Have you ever heard of epilepsy?	23(100)	93(69.9)	71(91.02)
2	Do you know a person suffering from epilepsy?	7(30.43)	27(20.3)	36(46.15)
3	Is epilepsy a mental illness?	4(17.39)	14(10.52)	44(56.41)
4	Is Epilepsy an organic brain problem	12(52.17)	67(50.37)	56(71.79)
5	Is Epilepsy known to occur in family	4(17.39)	27(20.3)	19(24.35)
6	Can Epilepsy spread by contact?	1(4.3)	7(5.2)	3(3.8)
7	What do you think is cause of Epilepsy?			
а	Don't know	6(26.08)	7(5.2)	4(5.1)
b	Organic brain disease	10(43.47)	62(46.6)	53(67.94)
С	Hereditary disorder	8(34.78)	45(33.83)	18(23.07)
d	Birth defect	8(34.78)	44(33.08)	9(11.53)
е	Evil spirit	0	0	2(2.5)
f	Super natural cause	0	0	12(15.38)
g	Mental disorder	1(4.3)	1(0.75)	4(5.1)
h	Blood disorder	2(8.6)	1(0.75)	4(5.1)
i	Other (please specify')	3(13.04)	51(38.34)	3(3.84)

8	What do you think an Epilepsy attack is?			
а	Convulsion	18(78.26) 87(65.41)		31(39.74)
b	Loss of consciousness	14(60.86)	84(63.15)	40(51.28
С	Mental attack	2(8.6)	5(3.7)	15(19.23)
d	Behavioral change	7(30.43)	22(16.54)	14(17.94)
е	Period of amnesia	9(39.13)	34(25.56)	8(10.25)
f	Other (please specify)	2(8.6)	10(7.5)	4(5.1)
9	You know about epilepsy from?			
а	Studies	20(86.95)	88(66.16)	53(67.94)
b	Researched about it	7(30.43) 20(15.03)		3(3.84)
С	Attended an epilepsy camp	13(56.52) 55(41.35)		18(23.07)
d	Yourself have it	1(4.3) 14(10.52)		4(5.1)
е	Some family member or friend has it	11(47.82)	21(15.78)	11(14.10)
f	Through television/ internet ads	17(73.91)	53(39.84)	12(15.38)

Table 1: Knowledge of Epilepsy

SI. No.	Questions	Nursing faculty n=23	Nursing students(n=211)	
			GNM n=133	B.Sc. n=78
		Positive response		
1	Epilepsy creates hindrance in normal life	14(60.8)	112(84.21)	49(62.82)
2	A person with epilepsy should not marry	2(8.6)	40(30.07)	30(38.46)
3	A person with epilepsy will not have normal sexual relations	3(13.04)	72(54.13)	28(35.89)
4	A person with epilepsy should not study	4(17.39)	43(32.33)	24(30.76)
5	A person with epilepsy should not work	4(17.39)	49(36.84)	22(28.20)
6	Society should behave differently with a person with epilepsy	6(26.08)	35(26.31)	29(37.17)
7	Would you like to play/study with an epileptic child?	20(86.95)	105(78.94)	63(80.76)
8	If you see a person having epileptic attack what will you do?			
a	Put shoe/onion on his face	1(4.3)	25(18.79)	10(12.82)
b	Give bunch of keys in his hand	0	0	1(1.28)
С	Take him to hospital	22(95.65)	89(66.91)	54(69.23)
d	Put water on his/her face	2(8.6)	9(6.7)	12(15.38)
е	Other (please specify)	3(13.04)	60(45.11)	15(19.23)
9	Have epileptics committed sins in the past life?	0	19(14.2)	30(38.46)
Table 2: Attitude towards epilepsy				

	Questions	Nursing	Nursing students(n=211)	
SI. No.		faculty n=23	GNM n=133	B.Sc. n=78
		Positive Response		
1	Can epilepsy be treated with Allopathic medicine?	23(100)	107(80.45)	61(78.20)
2	Can epilepsy be treated with Homeopathic medicine?	22(95.65)	106(79.69)	48(61.53)
3	Can epilepsy be treated with Ayurvedic medicine?	21(91.30)	116(87.21)	57(73.07)
4	Is Ayurvedic treatment the only option for epilepsy?	2(8.6)	13(9.7)	6(7.6)
5	Does an epileptic patient need lifelong treatment?	6(26.08)	32(24.06)	36(46.15)
6	A person with epilepsy should not miss even a single tablet	13(56.52)	86(64.66)	45(57.69)
7	Drug used in epilepsy will have many side-effects	10(43.47)	77(57.84)	35(44.87)
8	Tantric (holy) treatment is good for epilepsy	3(13.04	30(22.55)	27(34.61)
9	Priest can treat epilepsy better?	2(8.6)	22(16.54)	25(32.05)
10	Does an epileptic patient require lifelong treatment?	8(34.78)	35(26.31)	36(46.15)
11	Can epilepsy be cured?	17(73.91)	118(88.72)	64(82.05)

Table 3: Practice in Epilepsy

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