

Does a Didactic Lecture On Epilepsy for Nursing Students Improve Knowledge and Attitude?

Gaurav Verma¹, G. K. Vankar²

Department of Psychiatry, B. J. Medical College, Civil Hospital, Ahmedabad

Abstract: Background: Adequate knowledge regarding epilepsy and positive attitude towards epilepsy would make early recognition of and appropriate intervention in this disorder more likely and better outcome of illnesses. Good knowledge regarding the epilepsy can promote treatment adherence, failure of which is the main cause of further precipitation of seizures. Aims and objectives: To find out the efficacy of educational program on epilepsy in nursing student by measuring the pre and post intervention knowledge. Methods and Materials: Knowledge and attitudes of 94 nurses before and after attending one hour lecture on epilepsy care was assessed using questionnaires. Statistical analysis used: Chi square test. SPSS version 15 (statistical Package for social services). P value of <0.05 was considered statistically significant. Results: After the lecture, knowledge and attitudes of nurses improved regarding investigations and medical treatment. The most misunderstanding were reported regarding epilepsy surgery. There was no improvement in knowledge regarding quality of life. Conclusion: This is the first study to objectively measure improvement of knowledge and attitudes among nursing after lecture about epilepsy care. Reasons for low impact of lecture and strategies for improvement are discussed.

Keywords: Awareness, Attitude, Epilepsy, Knowledge, Nurse,

1. Introduction

Seizures are sudden, uncontrolled episodes of excessive electrical charges of the brain cells with associated sensory, motor and or behavioral changes. The phenomenon of recurrent seizures is termed as epilepsy, from the Greek word epilambanein, meaning to seize or attack. So epilepsy is a chronic disorder of the brain characterized by recurrent seizures. As per a recent study, 70 million people have epilepsy worldwide and nearly 90% of them are found in developing regions (1). Epilepsy was estimated to account for 0.5% of the global burden of disease, accounting for 7,307,975 disability adjusted life years (DALYs) in 2005 (2). The crude Prevalence of epilepsy is 5.35 per thousand in India (3). So early recognition and improved treatment of seizure disorder can predict and possibly to prevent seizures in people with known epilepsy. Radhakrishnan K, et al. (4) and Pandian JD, et al. (5) conducted study on epilepsy among the people of the state of Kerala, India. Chaichon Locharamkul, et al. (6) of Thailand conducted similar study.

2. Aims and Objectives

- To find out the efficacy of educational program on epilepsy in nursing student by measuring the pre and post intervention knowledge.
- Improve the knowledge and attitude towards the epilepsy.

3. Method and Materials

Knowledge and attitudes of 94 nursing students (2nd year bachelor of science) before and after attending one hour lecture on epilepsy care was assessed by using printed questionnaire. The Lecture was consist of power point presentation showing facts and images related to epilepsy.

There were 25 questions in questionnaire based on basic knowledge, diagnosis and treatment, quality of life and first aid. It was loosely similar as used in Thai epilepsy study (6).

4. Analysis

Analysis was done by using SPSS-15 version (Statistical Package For Social Sciences), Chi-square test was applied and p value <0.05 was considered statistically significant.

5. Result

The age range of students who participate in study were 19 to 21 years, predominant female (85 out of 94 participants). All students were studying graduation in bachelor of science (B.Sc) in nursing at government nursing college. There was statistically significant improvement in knowledge regarding questions like drugs should be used in generic form and normal EEG does not mean that patient has no epilepsy (table 1). Awareness regarding misconception like epileptic person cannot work as normal person and all patients with tonic attack or blackout should have epilepsy also improved but was not statistically significant (table 2). Students also reported more misunderstanding like epilepsy person must take drugs for all their life (table 3).

Table 1: p <0.05, positive improvement in knowledge

Questions	Intervention	Agree (%)	Disagree (%)	No Response
Drugs should be used in generic form	Pre- Post-	50 72.5	27.7 23.4	22.3 4.3
CT should the 1st test for detecting the cause of epilepsy	Pre- Post-	54.3 25.5	35.1 68.1	10.6 6.4
Patient Should continue the same dose of antiepileptic drugs	Pre- Post-	41.5 67	52.1 29.8	6.4 3.2
Normal EEG means that pt. has no epilepsy	Pre- Post-	53.2 29.8	43.6 68.1	3.2 2.1
Only GTCS is harmful and must be treated	Pre- Post-	56.4 28.7	31.9 61.7	11.7 9.6
Medically intractable epileptic pt. cannot become seizure free be cured	Pre- Post-	31.9 38.3	39.4 47.9	28.7 13.8
Soft object should be placed between the patient's teeth during GTCS	Pre- Post-	80.9 53.2	12.8 39.4	6.4 7.4
Epilepsy pt. who wander around during or after seizure should be restrained for their safety.	Pre- Post-	74.5 52.1	19.1 44.7	6.4 3.2
Normal people should never have seizure in their life	Pre- Post-	39.4 24.5	53.2 74.5	7.4 1.1

Table 2: Improvement in knowledge But Not Statistically Significant

Questions	Intervention	Agree(%)	Disagree (%)	No Response
Epilepsy persons cannot work like normal people	Pre post	27.7 25.5	70.2 73.4	2.1 1.1
All patient with tonic attack or blackout should have epilepsy	Pre post	28.7 30.9	63.8 68.1	7.4 1.1
Only psychological support can not diminish seizure	Pre post	51.1 67.0	42.6 28.7	6.4 4.3
A patient having isolated seizure attack should admitted in hospital, resuscitated, given iv fluid and monitored in ICU.	Pre post	52.1 38.3	43.6 59.6	4.3 2.1

Table 3: Misunderstanding reported in following Qs.

Questions	Intervention	Agree (%)	Disagree(%)	No response
Epilepsy patient must take drugs for all their life	Pre- Post-	22.3 50	71.3 47.9	6.4 2.1
Epilepsy is caused by stress	Pre post	72.3 96.8	24.5 2.1	3.2 1.1
All epilepsy patient should have tonic attack or black out	Pre- Post-	22.3 39.4	71.3 59.6	6.4 1.1
Only psychological support cannot diminish seizure	Pre- Post-	73.4 34	22.3 62.8	4.3 3.2

6. Discussion

This study showing that after intervention there was increase knowledge and awareness regarding epilepsy (table1&2). The misapprehended questions are shown in table 3. The most misunderstanding were reported regarding epilepsy surgery. There was no improvement in knowledge regarding quality of life. There are studies in literature which have measured knowledge and attitude of physician and students towards epilepsy. Chaichon Locharamkul, et al.(6) conducted Study of improvement of knowledge and attitudes on epilepsy care among two groups of physicians and nurses after educational course in Thailand. The most misunderstanding in this study were, incorrect first aid of seizure, misinterpretation of blood changes after antiepileptic drug therapy, prohibition of swimming in people with epilepsy. In AbRahmanAF(7),Conducted a study on about awareness and knowledge of epilepsy among students in a Malaysian university. In this study 5.3% students thought epilepsy is caused by evil spirits, 4.9% thought that it was contagious. The conclusion of this study

also indicate that awareness and knowledge of epilepsy among the students need to be improved. Pandian JD, et al.(5) conducted study on Knowledge and attitude and practice with respect to epilepsy among high school students in Kerala. In this study 60% students reported that epilepsy was a form of Insanity and many had faith in exorcism and visiting religious Places as ways to care epilepsy. 50% admitted that Epilepsy a hindrance to education, employment, and marriage.. Radhakrishnan K, et al. (4) conducted study among the people of the state of Kerala and reported that the prevalence ratio of 4.9 cases per 1,000 people. About 40% of the respondents felt that individuals with epilepsy could not be properly educated or employed. 11 % would object to their children having contact with epileptic children. So Misconceptions and negative attitudes were alarmingly high in all above studies including this study. Persistent and effective information campaigns, therefore, are necessary to change their attitudes toward person with epilepsy. So Adequate knowledge ,positive attitudes towards epilepsy and Early recognition and

appropriate intervention can leads to Better outcome of illnesses and removal misconceptions.

7. Conclusion

The conclusion of this study indicate that awareness and knowledge and epilepsy among the students need to be improved. Such interventions are effective in changing the attitude and improvement in knowledge. Adequate knowledge about the epilepsy identified the individual who may suffering epileptic seizure in that they can give the first aid to the patient they can prevent the injuries of the patient.

8. Acknowledgement

I express my gratitude to my teacher Dr.G.K Vanker, Department of Psychiatry, Civil Hospital, Ahmedabad, for guidance and helpful criticism during the study. I acknowledge help from Dr.Mohit Joshi, Dr.Nachicheta Desai, Dr.GauttamPrajapati and Dr.KhushbooKansal in course of study.

References

- [1] Ngugi AK, Bottomley C, Kleinschmidt I, Sander JW, Newton CR. Estimation of the burden of active and life-time epilepsy: A meta-analytic approach. *Epilepsia*. 2010;51:883–90.
- [2] Geneva: World Health Organization; 2006. WHO. Neurological Disorders: Public Health Challenges.
- [3] Sridharan R, Murthy BN. Prevalence and pattern of epilepsy in India. *Epilepsia*. 1999;40:631–6.
- [4] Radhakrishnan K, Pandian JD, Santhoshkumar T, Thomas SV, Deetha TD, Sarma PS, Jayachandran D, Mohamed E. Prevalence, knowledge, attitude, and practice of epilepsy in Kerala, South India. *Epilepsia* 2000;41:1027-35.
- [5] Pandian JD, et al. High school students' knowledge, attitude, and practice with respect to epilepsy in Kerala, southern India. *ActaNeurol Scand*. 2004 Jul;110(1):39-45.
- [6] ChaichonLocharernkul,Mn SS, Bn CL, One M. A Study of Knowledge and Attitude Improvement on Epilepsy among Thai Physicians and Nurses. 2010;93(8):875–84.
- [7] AbRahman AF. Awareness and knowledge of epilepsy among students in a Malaysian university. *Epilepsia* 2000 Aug;41(8):1027-35.