# "A Study to Assess the Effectiveness of Structured Teaching Programme on Knowledge Regarding Epilepsy in Children among Teachers in Selected Schools, Jaipur"

Nursing Student's Perception and their Future Intentions PUNAM DEBBARMA, DR. BALAVINDER KAUR B HIMALAYAN UNIVERSITY, Itanagar, Arunachal Pradesh, INDIA

#### Abstract:-

Background: Today's children are tomorrow's citizen. The prosperity of a nation depends upon the health of the future children. This is true especially for our country where this segment of population consist about one-fourth of the total population.

All the parents have fruitful ambition to have healthy child. Healthy children grow to become healthy adults who are strong enough both in body and mind. The resources spent on the care; upkeep and health of all young ones are investment for the future.

Epilepsy is the common neurological condition in the children. As it hits the most important formative years of the majority of the patients, education does get hampered, especially when parents are over protective and teachers are either non-supportive or neutral with negative attitude. What is needed is awareness and proper education about different type of seizures, do's and don'ts during an attack to the teachers. Once teachers accept and have empathy for them, peers would automatically accept them. Cordial ambience is bound to stimulate these children to study in sprit of the limitations due to seizures and antiepileptic drugs. They may not be the best but they must be encouraged to be their best.<sup>1</sup>

Epilepsy is known to men since centuries. Epilepsy day is celebrated worldwide on 7<sup>th</sup> November and same as epilepsy week on June 17-23 every year. The theme of the world epilepsy day in 2008 was "'Into The Light" (take epilepsy out of the shadows of misconception and 'into the light' of understanding).

Indian epilepsy association and Indian epilepsy society is working on national level for epilepsy in India. On international level International League Against Epilepsy is a association which is working on epilepsy.

#### I. INTRODUCTION

Epilepsy is probably the most common disorder seen by the child neurologist in India. The prevalence rate in India is 5.59 per 1,000 populations with no gender or geographical difference. The prevalence rate in South India is 1.4-2.99 per 1,000 populations. with the rate in rural community being twice that of urban area. According to comprehensive rural epilepsy study in South India prevalence rate in Andhra Pradesh is 6.2 per 1000 population and in Kerala it is 4.9 per 1000 population. The preva. lence is fairly at different age, reaching 6-8 cases per 1,000 individuals by adolescence, In the rajasthan urban rural neuroepidemiological survey observed that a prevalence rate is 8.8 per 1000 population <sup>10</sup>

"I have diabetes so I need a special diet", so easy to say to get what you want with love and pleasure. To say "I have epilepsy" not only need guts but a mental preparation to face all kind of discrimination and neglect at every stage of life even by your own family members and community members at large. Why? Because it has been associated with centuries of old stigma created by the society. Believed to it is being due to evil sprit. Epilepsy attack is also known as seizure and seizure means "to be seized by or possessed by". The very definition has an element of evil sprit or some kind of quack thoughts. It is so deep rooted that so many diagnostic and therapeutic advances have not been able to nullify its brunt especially at social front in many parts of the world, more so in our country.\footnote{1}

Though epilepsy is a symptom primarily of a neurological disorder it has a great extent psychiatric and psychological involvement. Epilepsy may cause personality disturbance, depression, poor academic ability, poor self confidence, learning difficulties. <sup>1</sup>

Epilepsy affects 65-70 percent of the children before the age of 20 years. It means that it hits the unfortunate ones during their most important formative years of life. Epilepsy and associated problems like behavior disturbances, overprotective and fearful attitude of family and non supportive attitude of the school teachers affects the education at the very foundation. <sup>1</sup>

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Most children spend nearly half their waking hours with their teachers and school personnel. Teachers, in general, do not receive any formal instruction on childhood illness during their training. It is important to consider the attitude and knowledge that teachers may have regarding childhood epilepsy, so teachers could have an important part to play in the management and surveillance of children with epilepsy.

#### II. OBJECTIVES OF THE STUDY

- To assess the knowledge regarding epilepsy in children among school teachers before and after the Structured teaching programme.
- To determine the effectiveness of Structured teaching programme on knowledge regarding epilepsy in children among school teachers.
- To determine the association between pre test knowledge and selected variables.

#### A. Inclusion criteria

• Teachers willing to participate.

#### B. Exclusion criteria

- Teachers with family history of epilepsy.
- Teachers who are suffering from epilepsy.

#### C. Hypothesis

- **H**<sub>1</sub> There will be a significant improvement in the knowledge of school teachers toward epilepsy after their exposure to the structured teaching programme.
- H<sub>2</sub> There are association between pre test knowledge with there selected demographical variable.

## D. Delimitation

- The study will be conducted among teachers in selected English medium schools.
- The study is restricted to 4 weeks only.

#### E. Projected outcome

The study will significantly improve in the level of knowledge Scores of school teachers regarding epilepsy in children.

## III. METHODS

#### A. Setting of the study

Setting refers to the area where the study is conducted. It is the physical location and condition in which data collection takes place in the study. <sup>32</sup>

This study was conducted in Veda school , Confi academy High school both the schools are situated in jaipur, in the radius of  $10\text{-}12~\mathrm{km}$  from institute of medical technology and nursing education . All included schools have 55-60 teaching staff with the 600-700 student strength.

#### B. Population

Population referred to as the target population, which represents the entire group or all the elements like individuals or objects that meet certain standards for inclusion in the study. <sup>33</sup>

In the present study population considered of teachers of Veda school , Confi academy High school.

## C. Sample

Sample consists of subject of the population selected to participate in a research study. It is a portion of the population, which represents the entire population. <sup>33</sup>

In the present study the sample consists of 50 school teachers.

#### D. Sampling Technique

Sampling refers to the process of selecting the portion of population to represent the entire population. <sup>53</sup> Subjects were selected from the sampling frame to achieve simple random sampling. According to the sampling criteria, simple random sampling technique was adopted, a sampling frame of the school teachers of the two schools were prepared and every 2<sup>nd</sup> teacher was selected for the study till 50 teachers were selected.

#### E. Criteria for Sample Selection

The sampling frame structured by the researcher included the following criteria.

### F. Inclusion Criteria

• Teachers willing to participate.

#### G. Exclusion criteria

- Teachers with family history of epilepsy.
- Teachers who are suffering from epilepsy.

#### H. Data Collection Instruments

Method of data collection includes development of tool, testing of validity and reliability and data collection procedure. 32

Tools are the instruments used by the researcher to collect the data. A self administered questionnaire was used by the investigator for the data collection.

## I. Development of the tool

The tool was developed based on the following

- Review of literature
- Consultation with subject experts
- Personal experience in the clinical setting

The following steps were undertaken to prepare the tool.

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#### J. Preparation of the blue print

A blue print was prepared prior to the construction of structured knowledge questionnaires based on which, the items were developed.

Self-administered structured questionnaire includes the domains with relevant questions.

- Knowledge (45 percent)
- Comprehension (42.5 percent) and
- Application (12.5 percent)

#### K. Content Validity

Validity refers to a complex concept which broadly concerns the soundness of the study's evidence, that is, whether the findings are cogent and convincing and well ground.

The knowledge questionnaire, answer key and content of STP was submitted to experts along with criteria checklist to establish the content validity. The tool was given to 6 experts for validation which include 5 Nursing experts, and 1 Statistician.

There was 100 percent agreement on all items, but suggestions were given to modify certain questions and the modifications were then made in the tool.

#### L. Criteria checklist

Criteria checklist was prepared to evaluate the STP content.

## M. Reliability of the Tool

Reliability of the tool is the degree of consistency which measures the attributes it is supposed to measure. It refers to the extent to which the same results are obtained on repeated administration of instrument. <sup>32</sup>

In order to establish the reliability of the tool, split half method was used. The tool administered to 5 subjects at Gnext school bilwa road, Jaipur and the test was first divided into 2 equal halves and correlation of the half test was found by using Karl Pearson correlation coefficient formula used and the significance of the correlation was tested by using probable error. The reliability of whole test was then established by Spearman's Brown Prophecy formula. The reliability of the structured questionnaire was found to be **0.78** Hence the tool was found highly reliable.

#### N. Description of the tool

Since no tool was readily available, the investigator constructed tool to collect the data. As per the review of existed literature and discussion with experts, the investigator decided to construct a self-administered structured questionnaire.

The tool consists of part I and part II.

- Part I: Demographic data.
- Part II: Self administered knowledge questionnaire related to epilepsy in children

**Part I:** The demographic variables has a total of 8 items ( age, gender, Religion, education qualification, total year of experience, marital status, place of domicile, source of information.

**Part II:** It consists of 40 items on knowledge of epilepsy in children. The aspects covered in the knowledge questionnaire were:

Meaning and Types of epilepsy – 4 items (10 percent) Incidence, Prevalence, Risk factors and Etiology – 5 items (12.5 percent)

Sign, Symptoms and Diagnosis - 5 items (12.5 percent) Management – 14 items (35 percent) Follow-up and Rehabilitation – 5 items (12.5 percent)

Health education – 7 items (17.5 percent)

## • SECTION- I

N = 50

Sl. No.	Chanastanistics	Catagomy	Res	pondents
S1. No.	Characteristics	Category	Number	Percent
		21-30	13	26 %
1.	Age (years)	31-40	15	30%
		41-50	14	28%
		>50	8	16%
2	Candan	Male	28	56%
2.	Gender	Female	22	44%
	Religion	Hindu	27	54%
2		Muslim	7	14%
3.		Christian	12	24%
		Other (specify)	4	8%
	Educational qualification	S.T.C.	12	24%
4		B.A., B.Ed.	26	52%
4.		M.Ed.	7	14%
		M.Phil	3	6%
		P.hd	2	4%
	Total years of experience (years)	<2	10	20%
5		3 to 5	22	44%
5.		5 to 7	13	26%
		>7	5	10%
	Marital status	Married	34	68%
6		Unmarried	10	20%
6.		Divorced	4	8%
		Widow	2	4%
7.	Place of domicile	Urban	42	84%
		Rural	8	16%
		Mass media	10	20%
8.	Source of	Contact with health Professional	12	24%
	information	Internet	19	38%
		Other ( specify)	9	18%

Table 1: Frequency and Percentage distribution of Respondents by Demographic Variables

The data in figure 3, reveals that the proportion of teachers 13 (26 percent) were in the age group of 21-30 years, 15 (30 percent) were in 31-40 years, 14 (28 percent)

were in 41-50 years and 8 (16 percent) were in the age group of above 50 years.

## • SECTION- II

N = 50

Sl No	Aspects	Max. score	Knowledge of Respondents					
			Pre test			Post test		
			Mean	SD	Mean%	Mean	SD	Mean%
1	Meaning & type of epilepsy	4	1.92	0.09	48%	2.54	0.13	63.5%
2	Incidence, Prevalence, Risk factors & Etiology	5	2.64	0.10	52.8%	3.88	0.15	77.6%
3	Sign, Symptoms & Diagnosis	5	2.3	0.11	46%	3.76	0.16	75.2%
4	Management	14	6.62	0.41	47.28%	11.28	0.28	80.57%
5	Follow-up & Rehabilitation	5	2.5	0.11	50%	4.08	0.12	81.6%
6	Health education	7	3.08	0.23	44%	5.44	0.19	77.71%
	Overall	40	19.06	1.05	47.65	30.98	1.03	77.45

Table 2: Aspect wise Pre test and Post test Mean knowledge about epilepsy in children

The data in table 2 depicts that mean percentage of pretest knowledge scores was highest (52.8 percent) in the area of incidence, prevalence, risk factors and etiology of epilepsy and lowest (44% percent) in the health education of

epilepsy. The mean percentage of post-test knowledge scores was highest (81.6percent) in the area of follow up & rehabilitation of epilepsy and lowest (63.5 percent) in the area of Meaning & type of epilepsy.

#### • SECTION- III

(N=30)

				•			(11= 50)
Variables	Inadequate Knowledge	Moderate Knowledge	Adequate Knowledge	Chi square χ2	Df	P value (0.05)	Inference
1. Age		<b>-</b>	<b>-</b>	1	u .	•	
A. 20-30 years	8	3	2			12.59	
B. $31 - 30$ years	10	4	1	2 20	6		NG
C. 36 – 45 years	7	5	2	2.38			NS
D. Above 45 year	5	3	0				
2. Gender		•	•		•	•	
A. Male	17	9	2	0.622	2	5.99	NS
B. Female	13	6	3	0.622	2	3.99	NS
3. Religion					•		
A. Hindu	18	7	2				
B. Muslim	4	2	1	3.318	6	12.59	NS
C. Christen	6	5	1				
D. Others	2	1	1				
4 Education				<u> </u>		•	•
A. S.T.C	7	5	0				
B. B.A., B.Ed	21	3	2	10.15		10.50	S
C. M. Ed.	2	4	1	19.15	6	12.59	
D. M phil	0	2	1				
E. P. hd.	0	1	1				
5. Year of experience	•	•		•	ı	•	
A. Less than 2 years	5	4	1				
B. 3 to 5 years	14	7	1	6.600	6	12.59	NS
C. 5 to 7 years	9	3	1	6.688			
D. More than 5 years	2	1	2				
7 Marital status	·				•		
A.Married	22	9	3				
B. Un married	6	3	1	3.063	6	12.59	NS
C.Divorce	1	2	1	3.003	6	12.39	
D.WIDOW	1	1	0				
8. Palace of domicial							
A. Urban	26	12	4	0.396	2	5.99	NS
B. Rural	4	3	1				
9. Source of Information							
A Mass media	5	2	3				
B. Contact with health professional	8	3	1				
C. Internat	8	10	1	16.10	6	12.59	S
D. Others (specify)	9	0	0				

Table 5: Association between pre-test knowledge score and selected demographic variables selected demographic variables

## • S = SIGNIFICANT

# • NS = NON SIGNIFICANT

The data in table 5 shows  $\chi 2$  value computed between the knowledge level of teachers regarding epilepsy in children and selected demographic variables. Variables such as education qualification, and source of information were significant at 0.05 level. Variables such as Age, Gender, Religion, Working experience, Marital status, and Place of domicial were not significant at 0.05 level Therefore the hypothesis stated there will be significant association between knowledge of teachers regarding epilepsy in children and selected demographic variables is accepted.

## IV. CONCLUSION

- The study findings revealed that:
  - ➤ The teachers have moderate knowledge regarding epilepsy in children.
  - ➤ It was found that there is lack of knowledge for the teachers regarding epilepsy in children, meaning and type of epilepsy.
  - ➤ Education program would help the teachers to updates with necessary knowledge with regards to the causes, prevention, management and effect of epilepsy on child's academic performance.

- ➤ There was significant association between the knowledge of subjects regarding epilepsy in children and selected demographics variables.
- > There was a marked increase in post- test knowledge score than pre-test knowledge score which explains the effectiveness of structured teaching program. Thus teachers should be encouraged to enhance their knowledge regarding epilepsy in children for proper care, support and timely management to prevent complication of child.

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