

# To Assess the Effectiveness of Planned Teaching on Knowledge Regarding Epilepsy in Children among the Anganwadi Workers

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## Abstract

**Introduction:** Epilepsy is a most common clinical entity in neurology clinics. The prevalence rates of epilepsy in India are similar to those of developed country. However, the large treatment gap is a major challenge to our public health system. Perinatal injuries are a major causative factor in children. There are very few epidemiological studies looking at the incidence of epilepsy from India. A state of Kerala with higher literacy rates better the public health awareness (4.9/1000).<sup>1</sup> a recent rural epilepsy surveillance program from Uttarakhand showed a prevalence rate of two or more meaningless seizures to be 7.5 per 1000.<sup>2</sup> A pediatric study from Kashmir valley shows prevalence rates of 3.74/1000 in males and 3.13/1000 in females.<sup>3</sup> A study conducted in Kolkata's urban population showed an annual incidence rate of 27.27 per 100,000 per year<sup>4</sup> as per a recent study, 70 million people have epilepsy worldwide and nearly 90% of them are found in developing regions. [1] The study also estimated a median prevalence of 1.54% (0.48-4.96%) for rural and 1.03% (0.28-3.8%) for urban studies in developing countries.<sup>5</sup>

**Aims:** The aim of the study is assess the effectiveness of planned teaching on knowledge regarding the epilepsy in children's among the Anganwadi female workers in selected Anganwadi.

**Material and Method:** The Descriptive evaluator approach was used in this study and the sampling technique was non probability convenient sampling was used. Data was collected using self structured knowledge questionnaire and sample size was 110 Anganwadi female workers.

**Result:** Study shows that pretest knowledge of anganwadi female worker3(2.73%)had poor level of knowledge score,58(52.73%)had average level of knowledge,45(40.9%)had good knowledge and no one was in excellent knowledge score, whereas in post test 65(59.09% had very good knowledge score and 23(20.91%)had excellent knowledge score.

**Conclusion:** Even though epilepsy is an eminently preventable and treatable condition, it still remains a major public health problem due to high stigma, wide socioeconomic inequity, huge treatment gap and the poor epilepsy healthcare delivery system in India. It is clearly evident that epilepsy is a complex public health problem that requires integrated multidisciplinary approach. Neurologists, public health professionals, psychiatrists, psychiatric social worker, psychiatric nurse and program managers need to join hands for prevention, improved care and rehabilitation of persons with epilepsy in India.

**Keywords:** *Planned teaching, Epilepsy, female workers, Anganwadi and knowledge.*

## Introduction

Epilepsy is one of the most frequent chronic disorders of childhood. The term epilepsy derives from

Greek word 'Epilamabavian' which means **to take hold of** or to seize. As per WHO intimates that 3-10 per 1000 of total world population have epilepsy.<sup>6</sup> As a children

are growing age spend most of the time in school and in school having frequent attack of seizure, large doses of antiepileptic drugs will interfere with learning of the child.<sup>7</sup> The prevalence rates of epilepsy in India are similar to those of developed country. However, the large treatment gap is a major challenge to our public health system. Perinatal injuries are a major causative factor in children. There are very few epidemiological studies looking at the incidence of epilepsy from India. A state of Kerala with higher literacy rates better the public health awareness (4.9/1000).<sup>1</sup> A recent rural epilepsy surveillance program from Uttarakhand showed a prevalence rate of two or more meaningless seizures to be 7.5 per 1000.<sup>2</sup> A pediatric study from Kashmir valley shows prevalence rates of 3.74/1000 in males and 3.13/1000 in females.<sup>3</sup> A study conducted in Kolkata's urban population showed an annual incidence rate of 27.27 per 100,000 per year.<sup>4</sup> as per a recent study, 70 million people have epilepsy worldwide and nearly 90% of them are found in developing regions. [1] The study also estimated a median prevalence of 1.54% (0.48-4.96%) for rural and 1.03% (0.28-3.8%) for urban studies in developing countries.<sup>5</sup>

**Aims:** Aims of the study is to assess the effectiveness of planned teaching on knowledge regarding the epilepsy in children's among the Anganwadi workers in selected

**Objectives:** To assess the existing knowledge regarding epilepsy in children's among the Anganwadi female workers in selected Anganwadi.

1. To assess the effectiveness of planned teaching on knowledge regarding epilepsy in children's among the Anganwadi female workers in selected Anganwadi.
2. To find out association between knowledge score with selected demographic variable.

### Material and Method

The Descriptive evaluator approach was used in this study and the sampling technique was non probability convenient sampling was used. Data was collected using self structured knowledge questionnaire and sample size was 110 Anganwadi female workers. Inclusion criteria were those who are willing to participated in the study and available during the data collection and exclusion criteria are Anganwadi female worker those who are attended same type of planned teaching before 6 months and those who are experience less than 6 month. The investigator visited selected Anganwadi in advance and

obtained the necessary permission from the concerned authorities. Based on the objectives and the hypothesis the data were analyzed by using various statistical tests.

### Result

The percentage wise distribution Anganwadi female workers with regards to their demographic characteristics. The data obtained to describe the sample characteristics including age, educational level, experiences in year and monthly family income.

**Table No. 1: Percentage wise Distribution according to Anganwadi female workers demographical variables. n = 110**

Demographic Variables	No of ASHA workers	Percentage (%)
<b>Age in years</b>		
20-30	9	8.2
31-40	32	29.1
41-50	42	38.2
51-60	27	24.5
<b>Educational Level</b>		
Primary school	8	7.3
High school	78	70.9
Graduation	18	16.4
Post Graduation	6	5.5
<b>Experience in Years</b>		
1-5 years	7	6.4
6-10 years	34	30.9
11-15year	12	10.9
>15 years	57	51.8
<b>Monthly Family Income(Rs)</b>		
Below 5000	48	43.6
5000-10000/	21	19.1
10001-15000/	8	7.3
>15000/	33	30

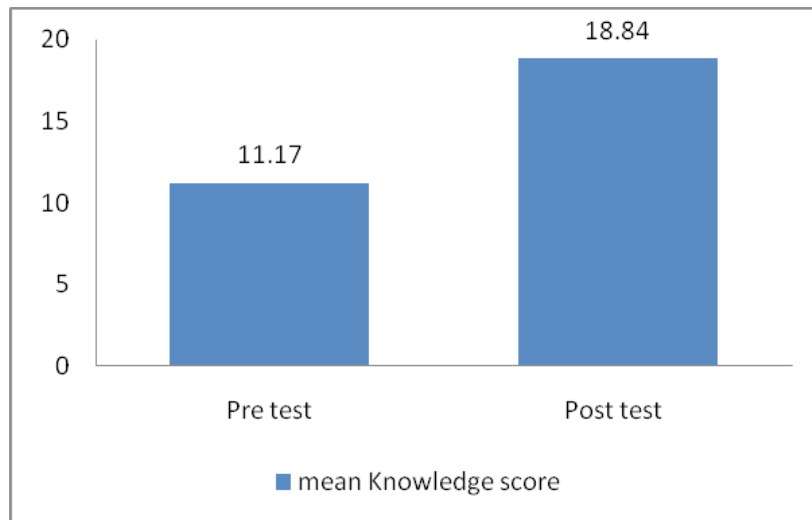
In the present study it was found that out of 110 Anganwadi female worker Majority of 9(8.20%) of the Anganwadi female workers were in the age group of 20-30 years, 32(29.10%) in the age group of 31-40 years, 42(38.20%) in the age group of 41-50 years and 27(24.5%) were in the age group of 51-60 years. Anganwadi Female Workers according to their Education 8(7.30%) of the Anganwadi female workers were educated upto primary school, 78(70.90%) were educated upto high

school, 18(16.40%) upto graduates and 6(5.50%) were postgraduates. Anganwadi Female Workers according to their experience 7(6.40%) of the Anganwadi female workers were having working experience of 1-5 years, 34(30.90%) had experience of 6-10 years, 12(10.90%) had 11-15 years and 57(51.80%) had experience of more than 15 years. Anganwadi Female Workers according to their Income (Rs) 48(43.60%) of Anganwadi female workers had monthly family income of below 5000 Rs, 21(19.10%) between 5000-10000 Rs, 8(7.30%) between 10000-15000 Rs and 33(30%) had monthly family income of Rs. More than 15000 Rs respectively.

**Table 4: Difference between knowledge score in pretest and post test of Anganwadi female workers.**

Overall	Mean	SD	Mean difference	t-value	p-value
Pre test	11.17	3.03	7.67±3.44	23.35	0.0001 S, p,0.05
Post test	18.84	2.82			

The above table shows that the effectiveness of planned teaching on knowledge regarding epilepsy in children’s among the Anganwadi female workers and the finding were in pretest and post test knowledge scores of Anganwadi Female workers regarding epilepsy in children. Pre test Mean 11.17 and post test mean are 18.84 effectiveness and student’s paired ‘t’ test is applied at 5% level of significance. The tabulated value for n=110-1 i.e 109 degrees of freedom was 1.98. The calculated ‘t’ value i.e. 23.35 are much higher than the tabulated value at 5% level of significance for overall knowledge score of Anganwadi female workers which was statistically acceptable level of significance. Hence it is statistically interpreted that the planned teaching programme on overall knowledge regarding epilepsy in children among Anganwadi female workers in selected Anganwadi was effective. Thus the H<sub>1</sub> is accepted.



**Fig. No. 1: Significance difference between the pre and post test knowledge score**

There is no significance association between knowledge score with selected demographic variable such as age, education, experience and monthly income.

**Discussion**

In this present study majority of 9(8.20%) of the anganwadi female workers were in the age group of 20-30 years, 32(29.10%) in the age group of 31-40 years, 42 (38.20%) in the age group of 41-50 years and 27(24.5%)

were in the age group of 51-60 years. Similar study which was conducted in to assess the effect of health educational program on knowledge about epilepsy and its management among primary schools teachers by **Magda Aly Mohamed and Omaima Elalem** and the finding was the majority 27(18.9%)were age group in 20-30 years, 69(48.3%) in the age group of 31-40 years, 38(26.6%) in the age group of 41-50 years and 9(6.3%) in the age group of 51-60 years.<sup>8</sup>

In our study finding Anganwadi female worker had heard about epilepsy with 47(49%) of them linking epilepsy to a central nervous system disturbance and some anganwadi female worker thought that epilepsy was black magic 18(21%), evil spirit 28(25%), a curse 17(20%)<sup>8</sup>

In this study shows that pre test knowledge of Anganwadi female worker 3(2.73%) had poor level of knowledge score, 58(52.73%) had average knowledge score, 45(40.9%) had good knowledge score, 4(3.69%) had very good knowledge score and 0(0%) had excellent knowledge score. Minimum knowledge score in pretest was 3 and maximum knowledge score in pretest was 20. Mean knowledge score in pretest was  $11.17 \pm 3.06$  and mean percentage of knowledge score in pre test was  $41.38 \pm 11.33$  and post test 0(0%) had poor level of knowledge score, 1(0.91) average knowledge score, 21(19.09%) had good knowledge score, 65(59.09%) had very good knowledge score and 23(20.91%) had excellent knowledge score. Minimum knowledge score in post test was 10 and maximum knowledge score in post test it was 25. Mean knowledge score in post test it was  $18.84 \pm 2.82$  and mean percentage of knowledge score in post test it was  $69.79 \pm 10.46$  similar study done to assess the effectiveness of planned teaching program on knowledge regarding epilepsy and its management among the teachers working in the selected primary schools of Belgaum, Karnataka in 2013 in that pretest majority of subject 37(74%) had average knowledge, 9(18%) had good knowledge and 4(8%) had poor knowledge whereas in post test majority of subjects 50(100%) had good knowledge.<sup>9</sup> therefore the planned teaching program on epilepsy is effective to improve the knowledge of the subjects.

**Recommendation:** On the basis of the study that had been conducted, certain recommendations are given for future studies.

1. A study can be done to compare the knowledge on management of epilepsy in school children among rural and urban primary school teachers.
2. A study can be done to assess the knowledge, practice and attitude regarding management of epilepsy in school children among teachers.
3. A study to evaluate a Video assisted teaching among primary school teachers regarding on management of epilepsy in school children.

## Conclusion

Even though epilepsy is an eminently preventable and treatable condition, it still remains a major public health problem due to high stigma, wide socioeconomic inequity, huge treatment gap and the poor epilepsy healthcare delivery system in India. In the anganwadi mainly anganwadi female workers may be the first adult to witness a child having a convulsion. Each and every child's behavior will vary according to the type of convulsion; therefore the anganwadi female workers should have the basic knowledge about the management of convulsion to provide first and foremost care to the child to save its life.

**Conflict of Interest:** Nil

**Source of Funding:** Self

**Ethical Clearance:** Ref no DMIMS (DU)/IEC/2017-18/6975 dated 05/01/2018.

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