Effectiveness of Planned Teaching on Knowledge Regarding Epilepsy in Children among Primary School Teachers

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Abstract: *A Pre-experimental study was conducted to assess the knowledge and view the effectiveness of planned teaching Programme regarding epilepsy in children among primary school teachers in the schools of Sangli, miraj, Kupawad corporation area. Total 80 Samples were selected by Non-probability cluster random sampling method. A Structured questionnaire was administered to collect data. It was found maximum of 56.3% of primary school teachers were having average knowledge score. The post test showed that, 57.5% Primary school teachers have good knowledge score, 38.8% have excellent knowledge score. This suggests that there is marked increase in post-test knowledge score and planned teaching was effective. The chi-square computed between pre-test knowledge and selected variables showed that knowledge was not dependent on age, sex, qualification, experience and previous knowledge.*

Keywords: Planned teaching programme, Knowledge, Epilepsy, Primary school teachers.

1. Introduction

The people since ancient times, who have or had chronic or recurrent seizures disorders, epilepsy, have been treated with variety degree of respect. Some cultures considered it as a curse of God; more frequently, it was considered a demonic possession. Now a day's people with epilepsy still confront superstition, insensitivity and discrimination.[1]

Child life is spent at school. Along with academic learning children also learn how to communicate and interact socially with their peer group. Study support that children with epilepsy are for the most part of normal intelligence. Approximately 25% of epileptics experience seizures that are uncontrolled by current forms of treatments. However depending upon the cause type and severity of seizures, the social impact of the seizures, and side effects of anti-epileptic medications, some children may face some challenges with learning and behaviour and require extra help at school.[2]

Epilepsy have highest prevalence rate in neurological conditions and it knows no age, racial, social class or boundaries. The impact of epilepsy is not only on the patient, but also on the family and indirectly on the society. The load of epilepsy may be due to the hazards of epilepsy resulting from the unpredictability of convulsions; the social exclusion as a result of false attitudes of non-epileptics toward people with epilepsy; A cases reported, children with epilepsy are banned from school, adults are barred from marriage, and employment is often not permitted, even when seizures would not render the work unsuitable or unsafe. Furthermore, epilepsy is a disorder associated with significant psychological consequences, with increased levels of anxiety, depression, and poor self-esteem compared with people without this condition.[3]

2. Literature Survey

Epilepsy is a disorder common childhood. Three epidemic studies on epilepsy reported the prevalence as ranging from 2.4 to 9 per thousand. In majority of the patients with epilepsy, the first seizures usually occur within the age of 14 years. Teachers being close to community are in the favourable position to advice parents on child health. [6]There are over 50 million sufferers in the world today, 85% of whom live in developing countries. An estimated 2.4 million new cases occur each year globally. At least 50% of cases begin at childhood or adolescence.70% to 80% of people with epilepsy could lead normal lives if properly treated. In developing countries, 60% to 90% of people with epilepsy receive no treatment due to inadequate knowledge due to social stigma. [3]

A questionnaire survey undertaken among 142 school teachers in North Staffordshire revealed most of the respondents did not feel confident when teaching children who had epilepsy and a minority considered their knowledge of the subject to be adequate. School health services have a responsibility that teachers should have sufficient knowledge of that communication between teachers, parents, and paediatricians are encouraged. [4]

A study was conducted to assess the knowledge and practice about epilepsy among schoolteachers in Northeast Uttar Pradesh. There is a substantial proportion (38.2%) was uncertain about relation of epilepsy and insanity and 31.7% felt epileptics to be of below average intelligence. Only about half of them (55.3%) preferred their children to play with an epileptic. An overwhelming no was obvious about marriage with an epileptic (86.8%). Only 27.8% of the respondents had given any first aid measure to a seizing patient with only 16.3% giving it properly. Besides adequate management, public education to address existing biases and fear are equally important to improve the quality of life of epileptics.[5]

As per the studies, epilepsy has too many myths and fewer facts known to the community. Whereas the facts comprises Epilepsy is the non-communicable and requires emergency management to avoid death. The absolute fact is epilepsy have no cure. It is the chronic medical problem that for many people can be successfully treated, but treatment does not work for everyone and there is critical need for more research to treat and cure the epilepsy. [3]The unawareness in the community suggests the education to the all regarding epilepsy in children as to treat the misconceptions, appropriate first aid management and remove the stigma on epileptic people. Along with parents, primary school teachers are the personnel who spend most of the time with the above age group which throws an eye of knowledge of epilepsy in children among primary school teachers and felt the need to do the undertaken study.

Problem Definition

"A study to assess the effectiveness of planned teaching programme on knowledge regarding Epilepsy in children among primary school teachers in selected Schools of Sangli Miraj Kupawad corporation area"

Research Objectives

- To assess the existing knowledge regarding epilepsy in children among primary school teachers.
- To assess the effectiveness of Planned teaching Programme on knowledge regarding epilepsy in children among Primary School Teachers.
- To find out the association between pre-test knowledge with selected demographical variables.

Hypothesis

Ho: There is no significant difference between pre-test and post-test knowledge scores of school teachers regarding epilepsy after planned teaching.

3. Method /Approach

Aquantitative research approach is used to assess the effectiveness of planned teaching programme on knowledge regarding Epilepsy in children among primary school teachers. Pre-experimental one group pretest-posttest design was used in the study.As the present study comes under pre experimental design, it has independent variable i.e. planned teaching programme and dependent as knowledge. Whereas research variables are age, sex, qualification and previous knowledge received. The present study settings were selected as per the needs and criteria. The settings were the primary Schools of Sangli, Miraj and Kupawad corporation area. Probability Cluster random Sampling is used. The Clusters were made with 3 groups viz Sangli, Miraj and Kupawad. Out of which the Schools were selected from each group through simple random sampling to get the required samples. The teachers were selected from Cambridge School, Miraj were 30.From Sangli KalantreAkkaPrimathamikVidhyamandir, Neminathnager 10,AbhinavBalakMandir, Vishrambhag had 10, UdyogratnaVelankar, Sangli 5, Kupawad schools were Z.P Shala -Bamnoli from which 15 primary school teachers and Nav Krishna Valley School-Kupawad had 10 primary school teachers.

4. Sampling Criteria

Inclusion criteria

- School teachers teaching 1st to 8th standard.
- Teachers who are available at the time of data collection period i.e. 2nd August 2016 to 4 September 2016.

Exclusion criteria

- Those who were present for pretest but absent for posttest.

Structured questionnaire were organized. The tool was divided into two sections. The first section contained demographic variable of the primary school teachers. The second section contained 20 multiple choice questions with four options for assessing knowledge with one correct answer. Questions were related to definition, causes, clinical manifestations, diagnostic evaluation, management, first aid of child with epilepsy. The content validity of the tool was done by 21 experts. The experts were selected from various fields based on the topic i.e., three pediatricians, six from pediatric nursing, two from medical surgical nursing, three from psychiatric nursing, three from community health nursing, three from obstetrics & gynecology nursing, and one statistician.The suggestions were to frame the questions in uniformity. Some inappropriate questions as was not important as per Primary school teacher's point of view and were deducted and final tool was prepared. The correct answer scored with one mark, wrong answer with 0 and maximum score was 20. Since it is a structured questionnaire the grading of the score was formulated by investigator with the help of educationist. The total was divided into 4 categories' less than 6 marks as poor, 6 – 10 marks as average, 10 – 15 marks as good and 16 – 20 marks as excellent. Research proposal with data collection tool was presented in front of the ethical committee. After approval of the ethical committee pilot study and final study were conducted, where it was promised that there will be no discomfort or risk to the participants and the received information will be kept confidential. The participation was voluntary. Participants can skip the study in any period. The prior permission from concerned authority was taken and informed written consent from each participant was taken. A prior permission was taken from concerned authorities of selected schools of Sangli Miraj Kupawad corporation area. Researcher visited the School and selected the Samples as per criteria. Informed consent was taken from sample after explaining purpose and objectives of the study. 15 minutes pre-test was taken by structured questionnaire. 45 minutes planned teaching programme was given immediately after pretest and post-test was conducted 7th day of plan teaching programme. The reliability was conducted in KCC PrthamikShala, Sangli from 02/08/16 to 08/08/2016.The reliability of the tool was determined by administering the structured questionnaire to 9 samples by test retest method with interval of 7 days. Karl Pearson's correlation coefficient formula was used for estimation of reliability. The reliability coefficient 'r' of the questionnaire was 0.765, which is more than 0.7, hence it was found to be reliable.The pilot study was conducted in Smt. Indira Patil, Children Academy, Sangli from 09/08/16 to 15/08/2016 to assess the feasibility of the study. 10 samples were taken for the pilot study. Pretest was taken after informed consent. Planned

teaching programme was given immediately after pretest and Posttest were conducted after 7 days of plan teaching programme. It was observed that in pretest all the primary school teachers had average knowledge regarding Epilepsy in children. After planned teaching programme it was found that 62.5% primary school teachers were having good knowledge, 37.5% having excellent knowledge regarding. The mean knowledge score of pretest was 43.75% and after planned teaching programme the mean knowledge score of posttest was improved with 70%.The pilot study was helped to visualize some practical problems that could be faced while conducting the study and gave better insight about research methodology. No changes were done after pilot study.

5. Result & Discussion

1) Sample Characteristics
The result showed maximum samples (42.5%) belonged to the age group of 31-40 years. Females samples were more with 73.8% than male (26.2%). 48.8% completed with B.Ed course, 40% were D.Ed qualified, there were no M.Ed qualified whereas 11.3% had other than D.Ed, B.Ed and M.Ed qualifications, 33.8% had below 5 years of experience. Most of the samples with 35% had experience of 6 - 15 years, 19 samples with 23.8% had experience of 16 - 25 years and remaining with 7.5% had more than 26 years of experience. Before giving planned teaching 83.3% primary school teachers were unaware of epilepsy.

2) Findings related to knowledge regarding Epilepsy in children among primary school teachers

Table 1: Pre Test Knowledge
n=80

Grading	Frequency	Percentage (%)
Poor (0-5)	16	20
Average (6 - 10)	45	56.25
Good (11 - 15)	19	23.75
Excellent (16 - 20)	0	0

Table 1showed, 20% primary school teacher hadpoor knowledge score, 56.3% had average knowledge score, 23.8% had good knowledge score and none of Primary school teacher had excellent knowledge score. It is evident that more efforts are necessary to improve the knowledge regarding Epilepsy in children among primary school teachers.

3) Frequency and percentage distribution post-test knowledge score.

Table 2: Post-test Knowledge Score
n=80

Grading	Frequency	Percentage (%)
Poor (0-5)	1	1.25
Average(6-10)	2	2.5
Good (11 - 15)	46	57.5
Excellent (16 - 20)	31	38.75

Table no.2 shows, 57.5% Primary school teachers have good knowledge score (1-15), 38.8% have excellent knowledge score, 1.3% have poor knowledge score and 2.5%of primary school teachers have average knowledge score. This

suggests that there is marked increase in post-test knowledge score.

4) Effectiveness of Planned teaching programme regarding epilepsy in children among primary school teachers

Table 3
n=80

Test	Mean	Standard Deviation	't' Value	'p' Value
Pre-test score	8.73	2.77	-15.651	0.000
Post-test score	14.71	2.53		

Table no.3shows, mean value of pre-test knowledge score is 8.73 and post-test knowledge score is 14.17. This suggests that there is statistically significant increase in post test score so planned teaching programme on epilepsy in children among primary school teacher was effective.

5) Association between demographic variables with pre-test knowledge score.

Table 5: Association with demographic variables and pre-test
n=80

Sr. no.	Demographic Variable	Chi-Square	p value	Remark
01	Age	6.961	0.324	No Significant association
02	Sex	4.962	0.084	No Significant association
03	Qualification	3.799	0.434	No Significant association
04	Experience	5.417	0.492	No Significant association
05	Previous Knowledge	1.088	0.581	No Significant association

Table no.4 indicates there is no significant association between age, sex, qualification, experience and previous knowledge and pre-test knowledge score as calculated 'p' value is more than tabulated 'p' (0.05) value. Thus it shows that there is no significant association between pre-test knowledge score and selected demographic variables.

6. Conclusion

A study was to assess the effectiveness of planned teaching on knowledge regarding epilepsy in children among primary school teachers in selected schools of Sangli, Miraj, Kupawad corporation area. Every sample in the study knew that Epilepsy is the disorder of brain. During presenting planned teaching it was found that the samples were confused about episodes of seizures and fainting spells. The unawareness about epilepsy in children among primary school teachers was clearly seen.

As unawareness was seen in primary school teachers about epilepsy in children, the unawareness about the first aid management was also seen which was a danger sign as it is said that teacher are the care takers in school. The school teachers before planned teaching answered that the child with epilepsy should be isolated, which again brings a controversy with rejection from the peer group. After the planned teaching the doubts of the primary school teachers were being cleared, where primary school teachers gave a positive response about the involving the epileptic child with his/her peer group and also was aware about the first aid management which is very important. It was seen that there

was significant difference between pre-test and post-test knowledge scores of school teachers regarding epilepsy after planned teaching and Null hypothesis was rejected.

7. Future Scope

1) A similar study can be conducted on a larger population for better generalization of the findings.
2) A similar study can be conducted using observational checklist.
3) A study can be conducted among nurses on knowledge and practices.
4) A similar study can be conducted to assess effectiveness of video assisted programme.
5) A comparative study can be conducted to assess the planned teaching programme and video assisted programme.
6) A study can be conducted to assess the attitude of caregivers regarding epilepsy in children.

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