WWW.IJRPR.COM

International Journal of Research Publication and Reviews

Journal homepage: www.ijrpr.com ISSN 2582-7421

A Study to Assess the Effectiveness of Structured Teaching Programme on Knowledge Regarding Febrile Convulsion among Mothers of Under Five Children Visiting Paediatric OPD at Selected Government Hospital, Kota.

Mr. Afzal Ahmed[1], Mr. Mohammed Irshad Rathore[2]

[1]Associative Professor, Laganshah Memorial Nursing College, RUHS, Rajasthan.
[2]M.Sc. Nursing Tutor, Laganshah Memorial Nursing College, RUHS, Rajasthan.

ABSTRACT

Introduction

Toddler is a child approximately 12 to 36 months old, though definitions vary. The toddler years are a time of great cognitive, emotional and social development. The word is derived from "to toddle", which means to walk unsteadily, like a child of this age. The occurrence of recurrent pneumonia which is defined as two or more episodes of pneumonia in 12 months or three episodes altogether with radiographic clearance in between is common among the toddlers.

Methodology

The present study was a pre-experimental one group pre-test and post-test research design was conducted at the govt. hospital of Kota. Total sample size was consisting of 60 study participants were selected by using of convenience sampling technique. The data was collected by the self-structured questionnaire and interview method. After that the data collection used the descriptive and inferential data analysis by using of SPSS.

Results

The findings revealed that, in the post-test majority of them had 45(75%) adequate knowledge, 15(25%) moderate and no one having inadequate knowledge regarding febrile convulsion. In post test mean is 24.41, SD 3.2 and mean percentage is 81.37. The overall mean knowledge score 24.41 obtained by the subject in post-test was higher than the mean knowledge score11.55 in the pre test and with the improvement score is 12.86. There was significant difference between pre and post test knowledge score with the t value of 37.6 found to be significant at $p<0.01$ level.

Discussion and Conclusion

This indicates that the structured teaching programme was highly effective in enhancing the knowledge of mothers of under five children regarding febrile convulsion. Hence the research hypothesis was accepted.

Keywords : *febrile convulsion , mothers , Structured Teaching Programme.*

INTRODUCTION

A febrile seizure is a convulsion in a child caused by a spike in body temperature, often from an infection. They occur in young children with normal development without a history of neurologic symptoms. It can be frightening when your child has a febrile seizure, and the few minutes it lasts can seem like an eternity. Fortunately, they're usually harmless and typically don't indicate a serious health problem.[1]

The incidence of neonatal convulsions ranges from 0.5% to 20% in various studies. The discrepancies in incidence seziure among various studies are due to varying conception ages of newborns and criteria for selection. Various studies revealed that the incidence was as low as 0.5% to as high as 14%.(1)

A febrile convulsion is a seizure occurring in a child, precipitated by a fever arising from infection outside the nervous system in a child who is otherwise neurologically normal. Febrile convulsions have long been recognised, but only in recent years more fully understood. Febrile convulsions are fits occurring in children associated with fever without other underlying causes such as central nervous system infection or electrolyte imbalance. The febrile

convulsion may be divided in to 1) Simple, begin and 2) Atypical, complex. Simple convulsion is generalized tonic-clonic convulsion lasting less than 15 minutes that do not recur within 24 hours or within the same febrile illness. The complex febrile convulsion is lasting more than 15 minutes; recurrence is within 24 hours or within the same febrile illness.[3]

Iron is essential for the functioning of certain neurotransmitters, such as monoamine oxidase and aldehyde oxidase. Iron-deficiency anemia may predispose to febrile seizures. Zinc deficiency is implicated as a risk factor for febrile seizures. Several preliminary studies have shown that deficiencies in vitamin B12, folic acid, selenium, calcium, and magnesium increase the risk of febrile seizures. Other risk factors include past history of febrile seizure, febrile seizure in a first-degree relative, intrauterine growth retardation, staying in a neonatal nursery >28 days, neurodevelopmental delay, and daycare attendance.[4]

Febrile seizures (FSs) are the most common neurological disorder observed in the pediatric age group. Seizures are frightening, but it is important that parents and care givers stay calm and carefully observe the child. An integral part of the management of a first febrile seizure is reassurance of the family. A first seizure can be a terrifying experience for many parents, who may think initially that their child is dying. The challenge is to help the family deal with the emotional trauma and to appreciate the excellence of the prognosis.[5]

The peak incidence of disease is at 18 months. Approximately 6-15% of febrile convulsions occur after later in life. Rarely febrile convulsion can cause brain damage. age of 4 years and onset after 6 years is very unusual. Febrile seizures are seizures that occur between the age of 6 and 60 months with a temperature of 38°C (100.4°F) or higher, that are not the result of central nervous system infection or any metabolic imbalance and that occur in the absence of a history of prior afebrile seizures. Genetic factors are clearly important for the occurrence of febrile convulsion. Although approximately 15% of children with epilepsy have had febrile seizures, only 2-7% of children who experience febrile seizures proceed to develop epilepsy later in life. Rarely febrile convulsion can cause brain damage.[6]

A population-based neuro-epidemiological survey of 102,557 individuals in urban and rural Bangalore in Southern India was conducted to determine the prevalence and pattern of neurological disorders. The study population included subjects from urban (51,502) and rural (51,055) areas, identified through a two-stage stratified random sampling method. Trained social workers administered the screening questionnaire, which had been tested and validated in an earlier pilot study and a neurologist examined the individuals who screened positive. Adults, children (<15 years) and elderly adults (>60 years) constituted 61, 34 and 5% of the study group, respectively.[7]

METHODS

Research design and setting

The present study was a pre-experimental one group pre-test and post-test research study were is conducted paediatric OPD of Government of Kota

Sample and sampling technique

In the present study the sample comprises of mothers of under five children. The total sample size 60 study participants were selected by using of convenience sampling technique

Description of the tool

Structured interview schedule was used as the research tool. After an extensive review of literature, discussion with the experts and based on the investigator's personal experience a structured interview schedule regarding febrile convulsion was developed to elicit responses from the subjects.

The tool consists of two sections:

Section I: It consisted of 10 items describing the socio-demographic variables such as age, type of family, place of residence, religion, educational status, occupational status, income, number of children, source of information and previous history of hospitalization.

Section II: The questionnaire was constructed with a total number of 30 items. Each item having four options, for correct answer the score is one and wrong answer the score is zero. The total score is 30, the score interpretation was divided into three categories, below 50% inadequate knowledge score, 51-75% have moderate knowledge score and more than 76% have adequate knowledge score regarding the seizure.

Ethical consideration

The researcher had taken permission from the parent institution to conduct research study. Permission was taken from the medical director and medical superintendent of Government Hospital, Kota to conduct the study. Consent was taken from parturient mothers before data collection.

Plan for data analysis

Data analysis is conducted to organize and giving meaning to the data. The data collected will be analyzed by using descriptive and inferential statistics.

Descriptive statistics for frequency and percentage distribution is used to describe the demographic variable. Mean and standard deviation is used to assess the level of knowledge on management of febrile convulsion among mothers of under five children

Inferential statistics paired‘t’ test is used to compare the pre-test and post-test knowledge on management of febrile convulsion among mothers of under five children. Chi-square test is used to analyze the association between post-test level of knowledge of mothers of under five children with their selected demographic variables.

RESULTS

Table-1 Frequency and percentage distribution of mothers of under five children according to demographic variable.

N=60

S.No	Variables	No	Percentage %
1	**Age**		
	a. 20-25yrs	26	43.33
	b. 26-30yrs	22	36.67
	c. 31-35yrs	9	15.00
	d. Above 35 yrs	3	5.00
2	**Type of the family**		
	a. Nuclear	42	70.00
	b. Joint	18	30.00
3	**Place of Residence**		
	a. Rural	42	70.00
	b. Urban	11	18.33
	c. Sub-urban	7	11.67
4	**Religion**		
	a. Hindu	36	60.00
	b. Muslim	12	20.00
	c. Christian	10	16.67
	d. Others	2	3.33
5	**Educational Status**		
	a. No formal education	6	10.00
	b. Primary school	14	23.34
	c. High school	20	33.33
	d. PUC	15	25.00
	e. Degree and above	5	8.33
6	**Occupational status**		
	a. Home maker	46	76.67
	b. Govt employee	3	5.00
	c. Self business	2	3.33
	d. Private employee	6	10.00
	e. Others	3	5.00
7	**Income of family in Rupees**		

	a. Less than 5000	8	13.33
	b. 5001-10,000	26	43.33
	c. 10,001-15,000	22	36.67
	d. Above 15,000	4	6.67
8	**No of children living**		
	a. One	19	31.67
	b. Two	31	51.67
	c. Three	8	13.33
	d. More than three	2	3.33

9	**Source of information**		
	a. Family members	15	25.00
	b. Neighbours	5	8.33
	c. Health care professionals	18	30.00
	d. Mass media	17	28.34
	e. Others	5	8.33
10	**Previous history of Hospitalization**		
	a. No previous history	41	68.33
	b. Respiratory infection	10	16.67
	c. Febrile convulsion	3	5.00
	d. Neurological disorder	3	5.00
	e. Others	3	5.00

Table-2. Distribution of comparison of pre and post test score of knowledge on management of febrile convulsion among mothers of under five children.

n=60

Level of knowledge	**Score**	**Pre test**		**Post test**	
		No	**%**	**No**	**%**
Inadequate	< 50%	48	80	0	0
Moderate	51--75%	12	20	15	25
Adequate	> 76%	0	0	45	75
Total		60	100	60	100

Table-2 Depicts that in pre-test 48(80%) having inadequate,12(20%) moderate and no one having adequate knowledge and in post-test 45(75%) having adequate, 15(25%) moderate, and no one having inadequate knowledge regarding febrile convulsion.

Table-3 Mean, SD and Mean% of the pre and post test knowledge on management of febrile convulsion among mothers of under five children.

Level of knowledge	**Pre test**			**Post test**			**Improved mean**		
	Mean	SD	Mean%	Mean	SD	Mean%	Mean	SD	Mean%
Overall	11.55	3.59	38.50	24.41	3.2	81.37	12.86	2.8	42.87

Table-3 shows that overall enhancement mean score is 12.86, SD 2.8, and mean percentage 42.87.Paired t test value is 37.6 significant at 0.01 level.

Table-4 Showing association between the pre-test knowledge score and selected demographic variables

N=60

Particular	**Number**	**Pre-Test Score**			**df**	X^2 **value**
		Inadequate	**Moderate**	**Adequate**		
Age (in years) of mother						
a) 20-25 years	26	22	04	00	**4**	**7.08 No significant**
b) 26-30 years	22	19	03	00		
c) 31-35 years	09	06	03	00		
d) Above 35 yrs	03	01	02	00		
Religion						
a) Hindu	36	33	03	00	**04**	**5.31 Insignificant**
b) Muslim	12	08	04	00		
c) Christian	10	06	04	00		
d) Others	02	01	01	00		
Educational status						
a) No formal	06	03	03	00	**05**	**13.56 Significant**
b) Primary	14	10	04	00		
c) High	20	17	03	00		
d) PUC	15	14	01	00		
e) Degree and above	05	04	01	00		
Occupation of Mother						
House wife	46	14	12	00	**08**	**8.92 No significant**
Governement	03	02	01	00		
Self Business	02	01	01	00		
Private	06	04	02	00		
Others	03	01	02			

Table-4 revealed that there is a significant association between post-test knowledge scores with their selected demographic variables among mothers of under five children. The result of the chi-square presented in table 10 indicate that there was significant association between post-test knowledge score with demographic variables such as type of family, education and previous history of hospitalization, evidenced that there was statistically association at $p<0.05$ level. Hence the research hypothesis (H2) is partially accepted**.**

DISCUSSION

The frequency and percentage distribution of mothers of under five children by age, type of family, place of residence, religion, education, occupation, income, number of children, source of information and previous history of hospitalization. Out of 60 samples age, majority26 (43.33%) were 20-25 years, 22(36.67%) were age between 26-30 years, 9(15%) were between 31-35 years and 3(5%) were above 35 years. In context to type of the family 42(70%) were belongs to nuclear family and 18(30%) belongs to joint family, depicts in context to place of residence 42(70%) were rural, 11(18.33%) were urban and 7(11.67%) were sub-urban. With regard to religion 36(60%) were Hindus, 12(20%) were Muslims, 10(16.67%) were Christian and 293.33%) were belongs to other religion. In context to educational status 6(10%)had no formal education, 14(23.34%) had primary, 20(33.33%) had high school, 15(25%) had PUC and 5(8.33%) had graduation.

In context to occupation 46(76.67%) were homemakers, 3(5%) were government employees, 2(3.33%) were doing self business, 6(10%) were private employees and 3(5%) were doing some other works. Regarding income of the family 8(13.33%) had less than 5000 rupees per month, 26(43.33%) had in between 5001-10000, 22(36.67%) had 10001- 15000, and 4(6.67%) yearning more than 15000 per month. Regarding the number of children 19(31.67%) mothers having one child, 31(51.67%) having two, 8(13.33%) having three and 2(3.33%) having more than three children. In context to source of information 15(25%) through family members, 5(8.33%) through neighbours, 18(30%) through health care professionals, 17(28.33%) through mass media, 5(8.33%) through other sources. Regarding previous history of hospitalization 41(68.33%) had no history of hospitalization, 10(16.67%) were admitted with the history of respiratory tract infection.3 (5%) with febrile convulsion,3(5%) with neurological disorder, and remaining 3(5%) was admitted with some other reasons.

In pre test pre test 48(80%) were inadequate, 12(20%) moderate and no one having adequate knowledge regarding febrile convulsion. In pre test mean is 11.55, SD 3.59 and mean percentage is 38.5.This reveals that majority of mothers of under five children having inadequate knowledge need to be educated and informed about the sexual health. The findings revels that, in the post-test majority of them had 45(75%) adequate knowledge, 15(25%) moderate and no one having inadequate knowledge regarding febrile convulsion. In post test mean is 24.41, SD 3.2 and mean percentage is 81.37. The association of demographic variable with pre test score of knowledge by using chi square test revealed there statistically significant association with variables such as type of family, education, and previous history of hospitalization, evidenced that there was statistically association at $p<0.05$ level and other variables were no significant. Hence the research hypothesis (H2) is partially accepted.

CONCLUSION

This study was conducted to assess the knowledge of regarding febrile convulsion among mothers of under five children visiting paediatric OPD at selected government hospital. A pre- experimental design was used by taking 60 samples through non-probability sampling technique at selected hospitals of Kota. The data was collected by using structured knowledge questionnaires. The data was developed and interpreted by using descriptive and inferential statistics on the basis of objectives.

REFERENCES

1. Black, M .Joyce , & Hawks , Hokanson . Jane (2007) .Medical surgical Nursing (8th edition) . Missouri: Elseiver Publication
2. Umar M, Kumari S, Nagpal N, Tripathi R, Maithani T, Ahmed A, et al. A DESCRIPTIVE STUDY TO ASSESS THE KNOWLEDGE OF NEONATAL CONVULSIONS AMONG NURSING STUDENTS AT NARAYAN NURSING COLLEGE, JAMUHAR SASARAM. Int J Sci Res. 2024 Apr 6;13:1–2. doi 10.36106/ijsr/0507612
3. Brunner & Suddarth ‘s (2012) . Textbook Of Medical – Surgical Nursing (12th edition).New Delhi : Wolters Kluwer (India) Publication
4. Deepika patel & Gokul patel.A Text book of Mental health & Psychiatric nursing.2nd ed.Jaipur.Amit publication.
5. Kapoor B. Text Book Psychiatric Nursing.vol-2.11th ed. Kumar Publishing House .
6. Kothari C.R (2010) . Research Methodology :Method & Techniques (2nd edition) . New Delhi : New Age International Publication
7. Mahajan B.K (1997). Methods in Biostatistics for Medical Students & Research Workers (6th edition).New Delhi :Jaypee Brothers Medical Publication