



ORIGINAL RESEARCH ARTICLE

MOTHERS' KNOWLEDGE AND ATTITUDE REGARDING FEBRILE CONVULSION IN CHILDREN

Binita Paudel¹, Gayatri Rana², Milan Lopchan³

¹School of Nursing, Chitwan Medical College, Bharatpur, Chitwan, Nepal.

*Correspondence to: Ms. Binita Paudel, School of Nursing, Chitwan Medical College, Bharatpur, Chitwan, Nepal.

Email: Paudel_binita@yahoo.com

ABSTRACT

Febrile convulsion is the most common seizure in children worldwide. Between 1 and 4% of children develop febrile convulsion within in 5 years of life. The study aimed at finding out mothers' knowledge and attitude regarding febrile convulsion in children. A descriptive cross sectional research design was used in which 126 mothers mother of children who are from 6 month to 5 years attending pediatric OPD of Chitwan Medical College- teaching hospital, Bharatpur- 10, Chitwan were interviewed by using semi-structured interview schedule. Data was analyzed by using IBM SPSS version 20. The study showed that, 29.4% respondents were having high knowledge regarding febrile convulsion in children, 53.2 % respondents having medium and 17.5% respondents having low knowledge regarding febrile convulsion in children. There was significant low knowledge regarding predisposing factors of febrile convulsion than other factors of febrile convulsion among respondents. There was no association between demographic variables and knowledge level of mothers on febrile convulsion. None of the respondents were having unfavorable attitude regarding febrile convulsion in children, 25.4% mothers having favorable attitude and 74.6% mothers having neutral attitude towards febrile convulsion in children. The study also reveals that there was significance association between ages of mother (0.000) and number of children (0.009) and attitude regarding febrile convulsion in children. There was positive correlation between knowledge and attitude of mothers regarding febrile convulsion in children.

Key words: Children from 6 month to 5 years, Convulsion, Mother

INTRODUCTION

Only healthy citizens lead the country in a successful manner to achieve the nation's progress. Hence the children should not suffer from any disease. The main primary symptom in any infection is fever and most of the mothers do not know that this fever can lead to convulsions and irreversible brain damage.

Febrile convulsions are a common pediatrics problem worldwide. They can be frightening, emotionally traumatic and anxiety provoking for parents. Appropriate knowledge and home management of febrile convulsion is needed to lessen the parental anxiety. Febrile seizures are defined as events in infancy or childhood that usually occur between three months and five years of age and are associated with a fever, but without evidence of intracranial infection or a defined cause for the seizure.¹

A febrile convulsion is a convulsion that occurs with a fever. Many infections in children cause fevers. In some children the fever triggers a convulsion. It is usually related to a fast rise in temperature, not the actual height of the temperature. Febrile convulsions are also called fever fits, or febrile seizures. Febrile convulsions are common. They are not the same as epilepsy. About 1 in 25 children will have a febrile convulsion. Febrile convulsions occur between the ages of 6 months and 5 years. They are less common after the age of 5 years. The tendency to febrile convulsions runs in families.²

Febrile seizures were associated with an increased risk of intellectual deficit only among children with preexisting neurological or developmental

abnormality, and in those who developed subsequent a febrile seizures. A third of the children with febrile seizures had a recurrence, and 9% had three or more recurrences. The major predictor of recurrence was early age at onset.²

Approximately one in every 25 children will have at least 1 febrile convulsion and more than one third of these children will have additional febrile convulsion before they outgrow the tendency to have them. Febrile seizures usually occur in children between the ages of 6 months and 5 years and are particularly common in toddlers. Children rarely develop their first febrile seizure before the age of 6 month or after 3 years of age.³

Febrile seizures are more common in males aged 1-3 years. Respectfully, Upper respiratory tract infections and body temperature $\geq 38.50^{\circ}\text{C}$ have the strongest association with the occurrence of febrile seizures.⁴

Every mother should be aware to control the rise of temperature without looking into the pathological cause of fever, controlling the pathological cause becomes secondary which should be controlled by administering prescribed antibiotics to the children. But the primary concept is to reduce the fever and prevent the occurrence of febrile convulsions, thereby the complications of hyper pyrexia could be prevented and early recovery could be made possible.

METHODS

Descriptive, cross sectional research design was used to find out knowledge and attitude regarding febrile convulsion in children among mothers having children from 6 month to 5 years of age attending Pediatric Out Patient Department (OPD) of Chitwan Medical College, Bharatpur, Chitwan. A total of 126 mothers were included in data collection from 8/10/2014 to 13/11/2014 using pretested semi-structured interview schedule.

Prior to the data collection, ethical approval was obtained from Chitwan Medical College Institutional Review Committee and data collection permission was taken from Chitwan Medical College. Verbal consent was taken with each respondent.

The collected data was checked, reviewed and organized daily for its accuracy, completeness and consistency. The data was entered in IBM SPSS version 20.0. Descriptive statistics such as frequency, percentage, mean and standard deviation was used for the socio-demographic and knowledge related items and inferential statistics (x2 test) was used to find out the association between variables.

RESULTS

The results of responses are displayed under individual question asked from the participants:

Table 1. Respondents Knowledge Score on Different Aspects of Febrile Convulsion

VARIABLES	MEAN SCORE \pm SD	PERCENTAGE OF MEAN SCORE	RANGE	MAXIMUM POSSIBLE SCORE
MEANING OF FEVER AND FEBRILE CONVULSION	2.24 \pm 0.82	74.66	0 – 3	3
CAUSES OF FEBRILE CONVULSION	1.54 \pm 0.74	51.33	0 – 3	3
PROGNOSIS OF FEBRILE CONVULSION	0.87 \pm 0.33	87.00	0 – 1	1
TOTAL	27.73 \pm 5.23	63.02	14 – 41	44

VARIABLES	MEAN SCORE \pm SD	PERCENTAGE OF MEAN SCORE	RANGE	MAXIMUM POSSIBLE SCORE
MANAGEMENT OF FEVER	4.42 \pm 1.30	73.66	1 – 6	6
PREDISPOSING FACTORS OF FEBRILE CONVULSION	4.03 \pm 1.50	44.77	1 – 8	9
CLINICAL MANIFESTATIONS OF FEBRILE CONVULSION	4.89 \pm 1.39	61.12	1 – 8	8
MANAGEMENT OF FEBRILE CONVULSION	7.96 \pm 2.28	72.36	1 – 11	11
COMPLICATIONS OF FEBRILE CONVULSION	1.25 \pm 0.94	41.66	1 – 3	3
PROGNOSIS OF FEBRILE CONVULSION	0.87 \pm 0.33	87.00	0 – 1	1
TOTAL	27.73 \pm 5.23	63.02	14 – 41	44

The mean knowledge score on prognosis of febrile convulsion was 0.87 with 0.33 standard deviation, mean score 87.00%, range 0-1, that was highest knowledge score among 8 components followed by mean knowledge score on meaning febrile convulsion was 2.24 with 0.82 standard deviation, mean score 74.66%, range 0-3.

The mean knowledge score on complication was 1.25 with 0.94 standard deviation, mean score 41.66%, range 1-3, that was lowest score of knowledge on febrile convulsion.

Overall mean knowledge score on febrile convulsion was 27.73 with 5.23 standard deviation, mean score 63.02%, range 12-41 with maximum possible score 44.

Table 2. Respondents' Level of Knowledge Regarding Febrile Convulsion

LEVEL OF KNOWLEDGE	FREQUENCY	PERCENT
POOR (\leq 50%)	22	17.4
FAIR (50.1% TO 70%)	67	53.2
GOOD (>70 %)	37	29.4
TOTAL	126	100.0

Regarding respondents level of knowledge, 17.4% of respondents had poor knowledge, 29.4% respondents had good knowledge and 53.2% respondents had fair knowledge.

Table 3. Respondent's level of attitude regarding febrile convulsion

LEVEL OF ATTITUDE	FREQUENCY	PERCENT
FAVORABLE (>75%)	32	25.4
MODERATE (50.1-75%)	94	74.6
UNFAVORABLE (\leq 50%)	-	-
TOTAL	126	100.0

Above three fourth, 74.6% respondents had moderate attitude regarding febrile convulsion in children and one fourth, 25.4% respondents had favorable attitude regarding febrile convulsion in children. None of the respondents had unfavorable attitude regarding febrile convulsion in children.

Table 4. Association of Socio-Demographic Characteristics with Respondents' Level of Knowledge regarding Febrile Convulsion

VARIABLES	LEVEL OF KNOWLEDGE			X ² VALUE	P-VALUE
	POOR KNOWLEDGE	FAIR KNOWLEDGE	GOOD KNOWLEDGE		
AGE GROUP (YEARS)				0190	0.909
≤25	9 (19.1)	24 (51.1)	14(29.8)		
>25	13 (16.5)	43 (54.4)	23 (29.1)		
RELIGION				5.399	0.067
HINDU	13(13.3)	55 (56.1)	30(30.6)		
OTHER THAN HINDU	9 (32.1)	12 (42.9)	7 (25.0)		
EDUCATION LEVEL				1.514	0.824
GENERAL LITERATE	1 (16.7)	4 (66.7)	1 (16.7)		
BASIC EDUCATION	5 (21.7)	10 (43.5)	8 (34.8)		
SECONDARY AND ABOVE	11 (12.3)	50 (56.2)	28 (31..5)		
OCCUPATION				0.133	0.936
HOUSE MAKER	14 (17.3)	44 (54.3)	23 (28.4)		
EMPLOYED	8 (17.8)	23 (51.1)	14 (31.1)		
FAMILY TYPE				1.946	0.378
NUCLEAR	14 (20.9)	32 (47.8)	21 (31.3)		
JOINT	8 (13.6)	35 (59.3)	16 (27.1)		
NUMBER OF CHILDREN				5.288	0.071
ONE	5 (11.6)	20 (46.5)	18 (41.9)		
TWO OR MORE	17 (20.5)	47 (56.6)	19 (22.9)		
EXPOSURE				2.807	0.246
YES	9 (13.8)	33 (50.8)	23 (35.4)		
NO	13 (21.3)	34 (55.7)	14 (23.0)		

Significance level at 0.05

Socio-demographic variables had no significant effect on level of knowledge regarding febrile convulsion in children among mothers. Hence there was no significant association between mothers' knowledge regarding febrile convulsion in children with age (0.909), religion (0.067), education level (0.824), occupation (0.936), family type (0.378), Exposure (0.246) and number of children they had (0.071).

Table 2. Association of Socio-Demographic Characteristics with Respondents' Attitude of Febrile Convulsion

VARIABLES	LEVEL OF KNOWLEDGE		X ² VALUE	P-VALUE
	MODERATE	FAVORABLE		
AGE GROUP (YEARS)			4.592	0.032
≤ 25	30 (63.8)	17 (36.2)		
> 25	64 (81.0)	15 (19.0)		

VARIABLES	LEVEL OF KNOWLEDGE		X ² VALUE	P-VALUE
	MODERATE	FAVORABLE		
RELIGION				
HINDU	72 (73.5)	26 (26.5)	0.299	0.584
OTHER THAN HINDU	22 (78.6)	6 (21.4)		
EDUCATION LEVEL				
GENERAL LITERATE	5 (83.3)	1 (16.7)	0.682	0.711
BASIC PRIMARY EDUCATION	18 (78.3)	5 (21.7)		
SECONDARY AND ABOVE	64 (71.9)	25 (28.1)		
OCCUPATION				
HOUSE MAKER	61 (75.3)	20 (24.7)	0.060	0.807
EMPLOYED	33 (73.3)	12 (26.7)		
FAMILY TYPE				
NUCLEAR	51 (76.1)	16 (23.9)	0.174	0.677
JOINT	43 (72.9)	16 (27.1)		
NUMBER OF CHILDREN				
ONE	26 (60.5)	17 (39.5)	6.887	0.009
TWO OR MORE	68 (81.9)	15 (18.1)		
PREVIOUS EXPOSURE				
YES	46 (70.8)	19 (29.2)	1.042	0.307
NO	48 (78.7)	13 (21.3)		

Significance level at 0.05

The level of attitude regarding febrile convulsion was statistically significant with the age of respondents at ($p=0.032$) and number of children they had at ($p=0.009$). Whereas other demographic variables had no significant effect on level of knowledge regarding febrile convulsion in children among mothers. Hence there was no significant association between mothers' knowledge regarding febrile convulsion in children with religion (0.584), education level (0.711), occupation (0.807), monthly income (0.091), family type (0.677), health seeking behavior (0.852), and exposure (0.307).

Table 2. Association of Socio-Demographic Characteristics with Respondents' Attitude of Febrile Convulsion

VARIABLES	CORRELATION COEFFICIENT (R)	P- VALUE
ATTITUDE	0.287	0.001
KNOWLEDGE		

Significance level at 0.05

The value of correlation was 0.287 which is significant at 0.001 and since r falls below 0.3, there is positive but weak correlation between knowledge and attitude score of the respondents.

DISCUSSION:

Concerning the socio demographical data, 43.7% respondents were at the age group of 26–30 and 3.9% of the respondents were 36 and above. Regarding religion, most of the respondents 77.7% were Hindu and only 3.2% were Christian. Regarding educational status, almost all 93.7% were literate and remaining 6.3% respondents were illiterate. Regarding level of education 5.1% respondents were general literate and 36.4%

respondents were having higher education (higher secondary and Bachelor and above).

Regarding occupation, 64.3% were house maker and only 7.9% were engaged in service. Regarding respondents' sources of information about febrile convulsion, most of the respondents 72.8% got information from family member, 44.8% got information from health personnel and 1.6% respondents got information from radio and television respectively.

Regarding meaning of febrile convulsion 76.2% respondents said it is associated with the significant rise in body temperature whereas the research finding revealed that only 28% respondents perceived febrile convulsion as associated with fever.⁵

Regarding total knowledge regarding febrile convulsion 17.5% respondents had poor knowledge i.e., $\leq 50\%$, 53.2% respondents had fair knowledge i.e., (50.1–70.0%) and 29.4% respondents had good knowledge i.e. (70.1–100%). The finding is inconsistent with the finding that only 10% of the respondents had adequate knowledge i.e. ($\geq 50\%$).⁵

There was no significant relationship between socio-demographic variables and mothers' knowledge about febrile convulsion. The finding was inconsistent with the finding that there was a significant relationship between education level and mothers' knowledge about febrile convulsion.⁶ None of the mothers had unfavorable attitude regarding febrile convulsion in children, 25.4% mothers had favorable attitude and rest mothers had neutral attitude towards febrile convulsion in children. Likewise another study finding revealed that mothers' attitude about febrile convulsion was less than average.⁷ There was association between ages of mother (0.000) and number of children they have (0.009) and attitude regarding febrile convulsion in children. There was positive correlation between knowledge and attitude of mothers regarding febrile convulsion in children. Likewise, another study done by revealed the connection between education, knowledge, and attitude of parents of children with febrile seizures.

CONCLUSION

The conclusions made are based on the findings of the study. The overall level of knowledge regarding febrile convulsion was fair among mothers. Knowledge on febrile convulsion was good in domain like meaning, management and prognosis, it was fair in domain like causes, clinical manifestation and it was poor in domain like predisposing factors and complication of febrile convulsion. The research also reveals that there was no association between socio-demographic variables and knowledge level of mothers.

None of the mothers had unfavorable attitude regarding febrile convulsion in children, Majority of the mothers tend to have moderate attitude and some tend to have favorable attitude towards febrile convulsive child. Age of mother and number of children they have tend to influence attitude regarding febrile convulsion in children. A positive correlation exists between knowledge and attitude of mothers regarding febrile convulsion in children.

Although the overall knowledge in febrile convulsion is fair among mothers it can be upgraded by distributing pamphlets on febrile convulsion and also providing health education to the mothers in well baby clinics.

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