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KNOWLEDGE, ATTITUDE AND PRACTICE OF MOTHERS TOWARD FEBRILE CONVULSION IN CHILDREN UNDER FIVE YEARS OLD AT AL-IMMAMEIN AL-KADHIMEIN MEDICAL CITY/ BAGHDAD

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ABSTRACT

Background: Febrile convulsion is the most common seizure in children under five, usually precipitated by fever without CNS infection. It typically presents with generalized tonic–clonic movements and transient loss of consciousness. The diagnosis of febrile convulsion is clinical, based on history and physical examination, with exclusion of intracranial and metabolic causes. Although benign and self-limiting, its sudden onset can be a frightening experience for parents.

Aims

1. To assess the knowledge, attitude, and practices of mothers toward febrile convulsion in children under five years in Al-Immamein Al-Kadhimein Medical City.
2. To assess the association between mothers' knowledge, attitude, and practices and their sociodemographic data.

Methods: A cross-sectional study was carried out on 300 mothers who have children under five years at Al-Immamein Al-Kadhimein Medical City in Baghdad, Iraq, from 1st February to 30th July 2025. They were selected through random sampling and interviewed face-to-face using a structured questionnaire to assess their knowledge, signs and symptoms, beliefs and attitudes, and practices regarding febrile convulsion. ***Result:*** Among the 300 participating mothers, 41.3% were aged 21–30 years. Regarding knowledge of febrile convulsion, 63% correctly identified that controlling fever is essential to prevent convulsions, and 54.7% knew that recurrent fever does not increase the risk. The highest incorrect responses were related to the necessity of EEG or CT scan (90%) and the need for medications in every child (83%). Knowledge was significantly higher among mothers aged >40 years, highly educated, those whose child had experienced febrile convulsion, and those with a family history of febrile convulsion. Relatives and friends were the most reported source of information (70%), followed by doctors and medical staff (41.7%). In terms of attitude, 90% agreed that children with febrile convulsion need more attention and care, and 80% believed in taking the child's temperature frequently during illness. Regarding practice, 66.3% reported lowering the child's body temperature, and 34.7% ensured placing the child on a soft and safe surface during convulsions. Good practice scores were significantly higher among highly educated mothers and those with a family history of febrile convulsion. ***Conclusion:*** The study has shown that most mothers had fair knowledge, neutral attitude, and fair practice regarding febrile convulsions, highlighting the need for educational and awareness programs to improve mothers' knowledge, attitudes, and practices, especially targeting those with lower education or no prior experience with febrile convulsions.

INTRODUCTION

Fever is a common reason for healthcare visits, accounting for about 70% of pediatric cases. Parents often perceive fever as a disease rather than a symptom of an underlying condition.[1]

Febrile convulsions (FC) are the most common type of seizures in children aged 6 months to 5 years, usually associated with fever, and often triggered by respiratory or gastrointestinal infections, without underlying neurological conditions.[2]

In the United States, approximately 1.5 million seizures occur annually, with up to 60% of children in affluent countries experiencing a febrile episode before age five.[3] The direct cause of febrile convulsions remains unknown, but they are associated with genetic factors, intrauterine conditions, and metabolic disturbances.[4]

Approximately one in every 25 children will undergo at least one febrile convulsion, with more than one-third experiencing recurrent episodes.[5] Children with fever and febrile convulsions represent about 20% of pediatric emergency visits worldwide.[6] A typical febrile convulsion is characterized by a generalized tonic–clonic seizure lasting a few seconds to 15 minutes, followed by a period of drowsiness.[7]

Despite their favorable prognosis, febrile convulsions can be emotionally distressing and anxiety-inducing for parents, making them a particularly challenging experience.[8] The assessment of a child with febrile convulsion begins with medical history and physical examination to identify the underlying cause of the fever.[9]

Parental knowledge about febrile seizures and how to manage them is a crucial aspect of treatment.[10] Most febrile seizures resolve before reaching a medical facility and do not require treatment. If persistent, management includes seizure control and fever reduction.[11]

The best approach involves effective communication with parents to reduce their fears and improve their response at home.[12] The long-term outcomes for children with febrile seizures are similar to those without seizures regarding school performance, behavior, and future healthcare us This study aims to assess the knowledge, attitude, and practices of mothers toward febrile convulsion in children under five years in Al-Immamein Al-Kadhimein Medical City and to assess the association between mothers' knowledge, attitude, and practices and their sociodemographic data.

Subjects and Methods

Study design

This cross-sectional study included 300 mothers and was conducted on a sample of mothers who attended the pediatric outpatient clinic at Al-Immamein Al-Kadhimein Medical City in Baghdad. It was carried out during a period of six months from 1st of February 2025 to 30th of July 2025.

Inclusion criteria

Data were collected from mothers who were 18 years of age or older, had children under the age of 5 years, were present at the time of data collection, and agreed to participate in the study.

Exclusion criteria

1. Mothers who refused to participate in the questionnaire or to express their opinion.

2. Mothers with older children and no children below the age of five.

Data collection

Data were collected by direct interview questionnaire which prepared by the researcher and supervisor according to a review of the literature.[13,14,15,16] The validity of questionnaire was also evaluated by three family medicine consultants.

The questionnaire was written in English but the interview was done in Arabic and included:

1. **Demographic data**

- Related to the mother: age, educational level, occupation, and place of residence.
- Related to the child: number of children under five, child's gender, history and frequency of febrile convulsion, and family history of seizures.

2. General knowledge about febrile convulsion: It included 21 multiple-choice questions designed to evaluate mothers' knowledge about febrile convulsions (FC). Each correct response was awarded one point, while incorrect answers or "I don't know" received zero. The total possible score ranged from 0 to 21, with higher scores indicating a higher level of knowledge. The knowledge levels were categorized as follows: poor knowledge (scores ≤ 11), fair knowledge (scores 12–17), and good knowledge (scores 18 or more).

3. Assessment of beliefs and attitudes: It consisted of 10 multiple-choice questions to assess mothers' attitudes toward febrile convulsion. Correct answers were given one point, and incorrect or "I don't know" responses scored zero. The total score ranged from 0 to 10, with higher scores representing more positive attitudes. Attitude levels were categorized as follows: negative attitude (scores <5), neutral attitude (scores 5–7), and positive attitude (scores 8–10).

4. Practice of prevention and first aid: It consisted of 12 multiple-choice questions measuring mothers' practices in managing febrile convulsion. Each correct answer received one point, and incorrect or "I don't know" responses scored zero. The total score ranged from 0 to 12, with higher scores reflecting better practice levels. Practice levels were categorized as follows: poor practice (scores <6), fair practice (scores 6–9), and good practice (scores 10–12).

Statistical analysis

Statistical analyses were carried out using the Statistical Package for Social Sciences (SPSS) version 25. Continuous variables are presented as means ± standard deviations, medians with interquartile ranges, and categorical variables as percentages. The significance of the difference in different percentages (qualitative data)

was tested using the Pearson Chi-square test (χ^2-test) with the application of Yates' correction or Fisher's Exact test whenever applicable. A P-value of less than 0.05 was considered significant.

Ethical consideration

- The study protocol was approved by the scientific council of the Arab board for health specialization of family medicine.
- Approval consents was obtained from Arab board of health specialization and Alkarkh health directorate in Baghdad.
- Consent obtained from manager of Al-Immamein Al-Kadhimein medical city included in the study.
- Verbal consents obtained also from all the participants prior to participation in the study.
- Each participant assured that the questionnaire does not require their names or addresses or any personal information, instead, their forms were coded by serial codes and kept in safe place.

RESULTS

A total of 300 eligible mothers of children under the age of five were recruited for this study. **Socio-demographic characteristics are illustrated in Table (1).**

Table 4.1: Socio-demographic characteristics of the mothers and their children.

Variable	No. (n= 300)	Percentage (%)
Age of mothers (years)		
18 – 20	36	12.0
21 – 30	124	41.3
31 – 40	110	36.7
> 40	30	10.0
Education		
Low literacy	86	28.7
Primary school	101	33.7
Secondary school	73	24.3
Higher education	40	13.3
Occupation		
Housewife	228	76.0
Student	15	5.0
Employee	40	13.3
Private work	17	5.7
Residency		
Urban	129	43.0
Rural	171	57.0
Number of children under 5 years		
1	194	64.7
2	82	27.3
≥ 3	24	8.0
Family members with a history of febrile convulsions		
None	273	91.0
Mother	10	3.3
Father	9	3.0
Siblings	8	2.7
Has your child experienced an episode of febrile convulsions?		
Yes	101	33.7
No	199	66.3
Age of your child at the first febrile convulsion episode (n = 101)		
6 – 12 months	33	32.7
> 1 – 3 years	37	36.6
> 3 – 5 years	31	30.7
Child gender (n= 101)		
Male	59	58.4
Female	42	41.6
Number of seizure episodes (n = 101)		
1 – 3/ day	22	21.8

1 – 3/ week	31	30.7
1 – 3/month	23	22.8
1 – 3/year	25	24.7
Parental presence during seizure episodes (n = 101)		
Yes	99	98.0
No	2	2.0

4.2. Knowledge towards febrile convulsions

Results from the mothers' responses to knowledge questions are illustrated in Table (2).

Table 2: Mothers' responses to knowledge questions about febrile convulsions.

Knowledge Questions	Responses		
	Yes (%)	No (%)	I Don't know (%)
Fever episodes and the child's age are the main causes of febrile convulsions.	190 (63.3) *	110 (36.7)	0 (0)
Children between the ages of 6 months and 5 years are at increased risk of developing febrile convulsions.	104 (34.7) *	196 (65.3)	0 (0)
Children who are fully vaccinated cannot develop febrile convulsions.	86 (28.7)	137 (45.7) *	77 (25.7)
Febrile convulsions are a complication of fever.	185 (61.7) *	25 (8.3)	90 (30.0)
Recurrent fever doesn't increase the risk of febrile convulsions.	49 (16.3)	164 (54.7) *	87 (29.0)
Control of fever is an essential way to prevent febrile convulsions.	189 (63.0) *	20 (6.7)	91 (30.3)
Febrile convulsions mean the child has epilepsy.	59 (19.7)	93 (31.0) *	148 (49.3)
Febrile convulsions are rare after the age of five.	36 (12.0) *	177 (59.0)	87 (29.0)
Anticonvulsant drugs are required for every child with febrile convulsions.	158 (52.7)	80 (26.7) *	62 (20.6)
Every child with febrile convulsions will have another febrile convulsion in the future.	195 (65.0)	32 (10.7) *	73 (24.3)
The recurrence of febrile convulsions will cause brain damage.	207 (69.0)	16 (5.3) *	77 (25.7)
The risk of subsequent epilepsy in febrile convulsions is rare	28 (9.3) *	187 (62.3)	85 (28.3)
Children with febrile convulsions can receive the vaccine on schedule	119 (39.7) *	161 (53.7)	20 (6.7)
It is necessary to put a protective device into the mouth to prevent tongue injury during convulsions	179 (59.7)	41 (13.6) *	80 (26.7)
It is necessary to restrain the child during a convulsion	245 (81.7)	18 (6.0) *	37 (12.3)
It is necessary to do mouth-to-mouth resuscitation during a convulsion	170 (56.7)	55 (18.3) *	75 (25.0)
An EEG or CT scan is necessary for every child with febrile convulsions.	270 (90.0)	8 (2.7) *	22 (7.3)
Does a febrile convulsion last more than 15 minutes	104 (34.7)	109 (36.3) *	87 (29.0)
A family history of convulsive disorder does not affect febrile convulsions	72 (24.0)	157 (52.3) *	71 (23.7)
Medications are needed for every child with febrile convulsions.	249 (83.0)	17 (5.7) *	34 (11.3)
Children with febrile convulsions will not have normal school achievements	120 (40.0)	110 (36.7) *	70 (23.3)

* Correct answer

Overall knowledge score

According to mothers' responses to knowledge-related questions, the overall knowledge score toward febrile convulsions was as follow: 91 mothers (30.3%) had poor knowledge (scores ≤ 11), 173 (57.7%) had a fair knowledge (scores 12 – 17), and 36 (12%) had good knowledge (scores 18 or more), as illustrated in Figure 1

.

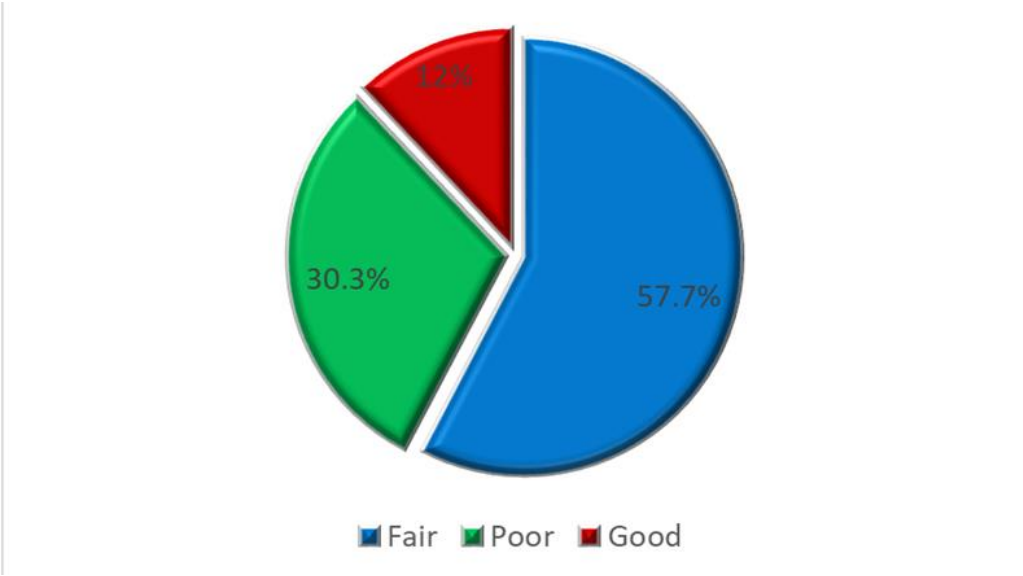

Figure 1: Distribution of mothers according to knowledge level.

This study found that the higher rates of good knowledge level were found in mothers aged > 40 (36.7%), highly educated mothers (30%), mothers of a child experienced an episode of febrile convulsion (24.8%), and those who had a family history of febrile convulsion (44.4%), with a statistically significant association ($P < 0.05$) between knowledge level and mother's age, education, history of episode of febrile convulsion, and family history of febrile convulsion. Other variables showed no significant association ($P \geq 0.05$) with knowledge level, as shown in Table 3.

Table 3: Distribution of mothers by knowledge level and general characteristics.

Variable	Knowledge level			Total (n= 300) No. (%)	P value
	Poor No. (%)	Fair No. (%)	Good No. (%)		
Age groups (Years)					
≤ 20	11 (30.6)	23 (63.9)	2 (5.6)	36 (12.0)	**0.001**
21 – 30	43 (34.7)	71 (57.3)	10 (8.1)	124 (41.3)	
31 – 40	32 (29.1)	65 (59.1)	13 (11.8)	110 (36.7)	
> 40	5 (16.7)	14 (46.7)	11 (36.7)	30 (10.0)	
Education					
Low literacy	39 (45.3)	41 (47.7)	6 (7.0)	86 (28.7)	**0.001**
Primary school	26 (25.7)	66 (65.3)	9 (8.9)	101 (33.7)	
Secondary school	20 (27.4)	44 (60.3)	9 (12.3)	73 (24.3)	
Higher education	6 (15)	22 (55.0)	12 (30.0)	40 (13.3)	
Occupation					
Housewife	74 (32.5)	130 (57)	24 (10.5)	228 (76.0)	**0.167**
Student	5 (33.3)	6 (40)	4 (26.7)	15 (5.0)	
Employee	8 (20.0)	28 (70.0)	4 (10.0)	40 (13.3)	
Private work	4 (23.5)	9 (52.9)	4 (23.5)	17 (5.7)	
Residency					
Urban	36 (27.9)	73 (56.6)	20 (15.5)	129 (43.0)	**0.247**
Rural	55 (32.2)	100 (58.5)	16 (9.4)	171 (57.0)	
Number of children under 5 years					
1	62 (32)	113 (58.2)	19 (9.8)	194 (64.7)	**0.409**
2	24 (29.3)	46 (56.1)	12 (14.6)	82 (27.3)	
≥ 3	5 (20.8)	14 (58.3)	5 (20.8)	24 (8.0)	
Has your child experienced an episode of febrile convulsions?					
Yes	22 (21.8)	54 (53.5)	25 (24.8)	101 (33.7)	**< 0.001**
No	69 (34.7)	119 (59.8)	11 (5.5)	199 (66.3)	
Family history of febrile convulsions					

Yes	4 (14.8)	11 (40.7)	12 (44.4)	27 (9.0)	**< 0.001**
No	87 (31.9)	162 (59.3)	24 (8.8)	273 (91.0)	

Attitude towards febrile convulsions

Results of the mothers' responses to attitude questions revealed that (90%) of participant mothers agreed that more attention and care are needed for a child with febrile convulsions, followed by (80%) who believed that parents should take their child's temperature frequently during illness. At the same time, more than half of the mothers (80.7%) incorrectly decided that a febrile convulsion attack is a life-threatening event, as shown in Table 4.

Table 4: Mothers' responses to attitude questions about febrile convulsions.

Attitude Questions	Responses		
	Agree (%)	Neutral (%)	Disagree (%)
More attention and care are needed for a child with febrile convulsions.	270 (90.0) *	14 (4.7)	16 (5.3)
Parents should take their child's temperature frequently during illness.	240 (80.0) *	38 (12.7)	22 (7.3)
It is shameful to have a child with febrile convulsions.	39 (13.0)	25 (8.3)	236 (78.7) *
Febrile convulsions can be outgrown.	83 (27.7) *	126 (42.0)	91 (30.3)
Folk medicine is necessary in the treatment of febrile convulsions.	162 (54.0)	42 (14.0)	96 (32.0) *
Febrile convulsions can lead to epilepsy.	166 (55.3)	107 (35.7)	27 (9.0) *
A febrile convulsions attack is a life-threatening event.	242 (80.7)	42 (14.0)	16 (5.3) *
Febrile convulsions can cause brain damage.	232(77.3)	60 (20.0)	8 (2.7) *
Febrile convulsions can lead to mental retardation.	216 (72.0)	58 (19.3)	26 (8.7) *
Febrile convulsions can be infectious	49 (16.3)	60 (20.0)	191 (63.7) *

* Correct answer

Overall attitude score

Results of mothers' responses to attitude questions revealed that 36 (12%) of mothers had negative attitude (scores < 5), 201 (67%) had neutral attitude (scores 5 – 7), and 63 (21%) had positive attitude (scores 8 – 10), as illustrated in Figure 4.4.

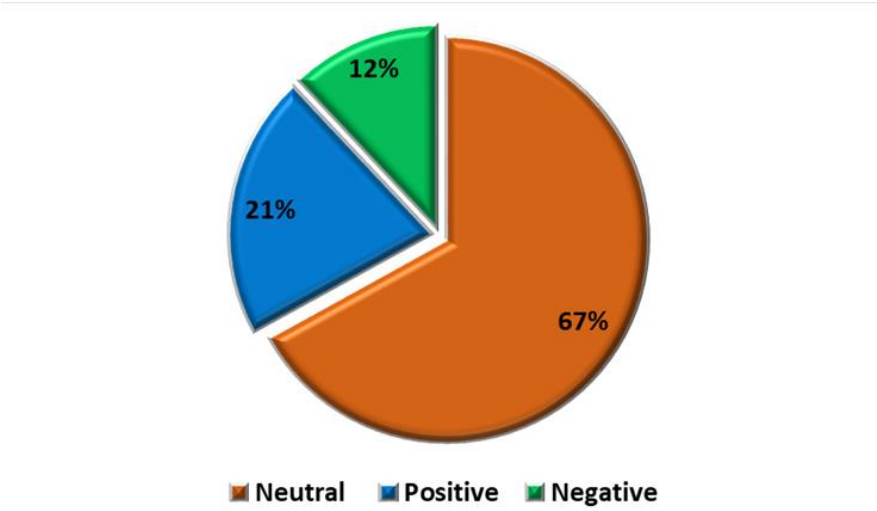

Figure 2: Distribution of mothers according to attitude level.

In the present study, there was a significant association between attitude level of the participant mothers and education level, history of episode of febrile convulsion, and family history of febrile convulsion, as the higher rates of positive attitude level were seen in mothers who had a higher education (35%, P= 0.016), mothers of a child experienced an episode of febrile convulsion (31.4%, P < 0.001), and those who had a family history of febrile convulsion (48.1%, P < 0.001). Attitude level was not significantly different between the other variables (P ≥ 0.05), as shown in Table 4.5.

Table 5: Distribution of mothers by attitude level and general characteristics.

Variable	Attitude level			Total (n= 300) No. (%)	P value
	Negative No. (%)	Neutral No. (%)	Positive No. (%)		
Age groups (Years)					
≤ 20	6 (16.7)	21 (58.3)	9 (25)	36 (12.0)	**0.295**
21 – 30	19 (15.3)	76 (61.3)	29 (23.4)	124 (41.3)	
31 – 40	9 (8.2)	81 (73.6)	20 (18.2)	110 (36.7)	
> 40	2 (6.7)	23 (76.7)	5 (16.7)	30(10.0)	
Education					
Low literacy	16 (18.6)	58 (67.4)	12 (14.0)	86 (28.7)	**0.016**
Primary school	14 (13.9)	68 (67.3)	19 (18.8)	101 (33.7)	
Secondary school	6 (8.2)	49 (67.1)	18 (24.7)	73 (24.3)	
Higher education	0 (0)	26 (65.0)	14 (35.0)	40 (13.3)	
Occupation					
Housewife	33 (14.5)	148 (64.9)	47 (20.6)	228 (76.0)	**0.394**
Student	1 (6.7)	10 (66.7)	4 (26.7)	15 (5.0)	
Employee	2 (5.0)	30 (75.0)	8 (20.0)	40 (13.3)	
Private work	0 (0)	13 (76.5)	4 (23.5)	17 (5.7)	
Residency					
Urban	12 (9.3)	91 (70.5)	26 (20.2)	129 (43.0)	**0.391**
Rural	24 (14)	110 (64.3)	37 (21.6)	171 (57.0)	
Number of children under 5 years					
1	18 (9.3)	132 (68)	44 (22.7)	194 (64.7)	**0.283**
2	13 (15.9)	53 (64.6)	16 (19.5)	82 (27.3)	
≥ 3	5 (20.8)	16 (66.7)	3 (12.5)	24 (8.0)	
Has your child experienced an episode of febrile convulsions?					
Yes	4 (3.9)	66 (64.7)	32 (31.4)	102 (34.0)	**< 0.001**
No	32 (16.2)	135 (68.2)	31 (15.7)	198 (66.0)	
Family history of febrile convulsions					
Yes	0 (0)	14 (51.9)	13 (48.1)	27 (9.0)	**< 0.001**
No	36 (13.2)	187 (68.5)	50 (18.3)	273 (91.0)	

Practice responses

Table 6 summarizes mothers' practices regarding the management of a child's febrile convulsion episode. Regarding the correct practices, lowering the child's body temperature was the most frequently reported practice, by 67 mothers (66.3%), followed by protecting the child on a soft and safe surface by 35 (34.7%). Regarding the incorrect practices, rushing the child to a doctor without providing first aid and prying the convulsing child's clenched teeth apart and putting something in his/her mouth, were reported by 43 (42.6%) and 39 (38.6%), respectively.

Table 6: Mothers' practices regarding the management of a child's febrile convulsion.

Practice Questions	Responses	
	Yes No. (n= 101)	Percentage (%)
Lower the child's body temperature *	67	66.3
Shake and wake the convulsing child	35	34.7
Cardiac massage	20	19.8
Protect the child on a soft and safe surface *	35	34.7
Rush the child to a doctor without providing first aid first.	43	42.6
Pry the convulsing child's clenched teeth apart and put something in his/her mouth	39	38.6
Restrain the convulsing child	29	28.7
Place the child on his/her side *	27	26.7
Keep calm *	22	21.8
Do mouth-to-mouth resuscitation	9	8.9
Suck discharge from the child's nose and mouth.	10	9.9
Others	5	4.9

* Correct practice

- Mothers can select more than one practice; therefore, the percentage exceeded 100%

4.4.1. Overall practice score

The analysis of mothers' practices regarding the management of a child's febrile convulsion showed that 31 (30.7%) demonstrated poor practice (scores < 6), 54 (53.5%) had fair practice (scores between 6 and 9), and 16 (15.8%) exhibited good practice, as illustrated in Figure 3.

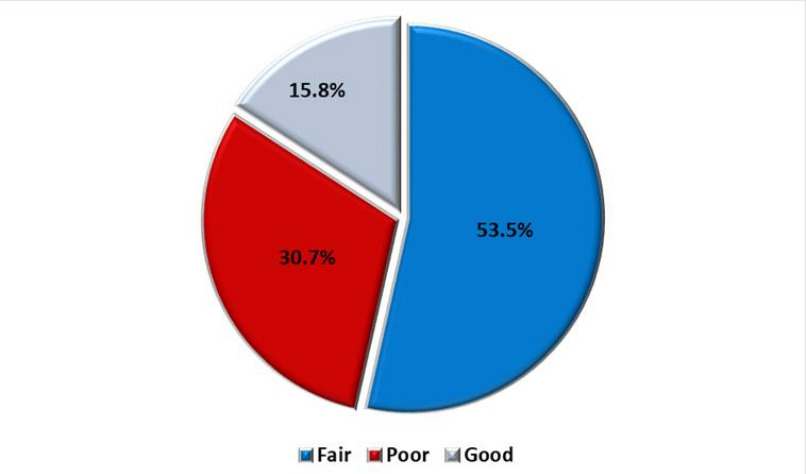

Figure 3: Distribution of mothers according to practice level.

This study found a significant association between practice level of the participant mothers and each education level and family history of febrile convulsion, as the higher rates of good practice level were seen among highly educated mothers (28.6%, P= 0.036) and mothers who had a family history of febrile convulsion (33.3%, P = 0.006), other variables had no significant association with practice level (P ≥ 0.05), as shown in Table 7.

Table 7: Distribution of mothers by practice level and general characteristics.

Variable	Practice level			Total (n= 101) No. (%)	P value
	Poor No. (%)	Fair No. (%)	Good No. (%)		
Age groups (Years)					
≤ 20	5 (50)	2 (20)	3 (30)	10 (9.9)	**0.153**
21 – 30	15 (37.5)	19 (47.5)	6 (15)	40 (39.6)	
31 – 40	9 (20.9)	29 (67.4)	5 (11.6)	43 (42.6)	
> 40	2 (25)	4 (50)	2 (25)	8 (7.9)	
Education					
Low literacy	4 (18.2)	16 (72.7)	2 (9.1)	22 (21.8)	**0.036**
Primary school	12 (42.9)	13 (46.4)	3 (10.7)	28 (27.7)	
Secondary school	13 (43.3)	12 (40)	5 (16.7)	30 (29.7)	
Higher education	2 (9.5)	13 (61.9)	6 (28.6)	21 (20.8)	
Occupation					
Housewife	21 (33.9)	34 (54.8)	7 (11.3)	62 (61.4)	**0.764**
Student	3 (27.3)	6 (54.5)	2 (18.2)	11 (10.9)	
Employee	3 (20)	8 (53.3)	4 (26.7)	15 (14.9)	
Private work	4 (30.8)	6 (46.2)	3 (23.1)	13 (12.9)	
Residency					
Urban	13 (26.5)	29 (59.2)	7 (14.3)	49 (48.5)	**0.531**
Rural	18 (34.6)	25 (48.1)	9 (17.3)	52 (51.5)	
Number of children under 5 years					
1	19 (39.6)	24 (50)	5 (10.4)	48 (47.5)	**0.314**
2	8 (21.6)	22 (59.5)	7 (18.9)	37 (36.6)	
≥ 3	4 (25)	8 (50)	4 (25)	16 (15.8)	
Family history of febrile convulsions					
Yes	4 (14.8)	14 (51.9)	9 (33.3)	27 (26.7)	**0.006**
No	27 (36.5)	40 (54.1)	7 (9.5)	74 (73.3)	

DISCUSSION

Overall Knowledge Score

In this study, 30.3% of mothers had poor knowledge, 57.7% fair, and 12% good knowledge about febrile convulsions. In comparison, a study conducted in Riyadh, Saudi Arabia 2023 reported 88.9% poor, 9.9% moderate, and 1.2% good knowledge.[16] Similarly, a study in Baghdad, Iraq 2021 found 39% poor, 48% fair, and 13% good knowledge.[8]

These findings suggest that maternal knowledge in our sample is better than that observed in Riyadh and comparable to the levels reported in Baghdad. This may reflect differences in educational programs and access to health information across these regions.

Associations between knowledge levels and sociodemographic characteristics

In this study, there was a statistically significant association between knowledge score and mothers' age, education level, history of febrile convulsions in their child, and family history ($P < 0.05$). Higher knowledge was more common among mothers aged > 40 years (36.7%), those with higher education (30%), those whose child had experienced febrile convulsions (24.8%), and those with a family history (44.4%). Other factors showed no significant association ($P \geq 0.05$). These findings are consistent with a study conducted in Saudi Arabia 2020, which reported better knowledge among mothers with higher education levels and those with prior exposure to febrile convulsions.[7] This may be due to the fact that older and more educated mothers are more likely to access and understand health information, and that having a child or relative with febrile convulsions increases awareness through personal experience and medical interaction. In addition, a study from Riyadh, Saudi Arabia 2023 found that parents with a positive family history of febrile convulsions showed significantly better knowledge, supporting the idea that prior personal or familial experience with febrile seizures enhances awareness.[16]

Overall attitude score

In our study, 21% of mothers had a positive attitude toward febrile convulsions, 67% were neutral, and only 12% had a negative attitude. In comparison, a study conducted in Saudi Arabia 2023 reported 22% positive, 51% neutral, and 27% negative attitudes.[17] This difference may be attributed to variations in health education, cultural beliefs, or access to healthcare information, suggesting that our participants were more accepting and less fearful of febrile convulsions.

Association between attitude and sociodemographic characteristics

In this study, a more positive attitude was significantly associated with higher maternal education (35%), child's history of febrile convulsions (31.4%), and family history (48.1%). Similarly, a study from Riyadh, Saudi Arabia 2023 found significant associations between higher attitude scores and higher education ($P = 0.019$), having a child with febrile convulsions ($P < 0.001$), and sibling history of febrile convulsion ($P = 0.002$), supporting the influence of both awareness and direct experience on parental attitude.[16]

Overall practice score

In the current study, only 15.8% of mothers demonstrated good practice regarding febrile convulsion management, while 53.5% had fair practice and 30.7% showed poor practice. Compared to a study conducted in Iraq 2019, where 38% of parents showed good practice, 39% had fair practice, and 23% demonstrated poor practice, the current findings indicate a lower level of adequate practice.[12] This gap may be attributed to differences in parental education, prior exposure to febrile convulsion episodes, or availability of health education programs**.**

Association between practice and sociodemographic characteristics

This study showed that mothers with higher education (28.6%, $P = 0.036$) and a family history of febrile convulsions (33.3%, $P = 0.006$) had significantly better practice levels. This suggests that education and prior experience play key roles in improving care, while other factors were not significantly related ($P \geq 0.05$).

CONCLUSION

The study has shown that most mothers had fair knowledge, neutral attitude, and fair practice regarding febrile convulsions, highlighting the need for educational and awareness programs to improve mothers' knowledge, attitudes, and practices, especially targeting those with lower education or no prior experience with febrile convulsions.

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