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Parental Knowledge and Attitudes Toward Pediatric Fever: A Comparative Study Between Healthcare and Non-healthcare Parents

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Abstract

Fever is a leading cause of pediatric emergency visits and, despite often being self-limiting, remains a source of anxiety and frequent mismanagement. Parents' knowledge and attitudes significantly influence fever management and healthcare-seeking behaviors. This study aimed to evaluate and compare fever-related knowledge and attitudes between healthcare-professional parents and non-professional parents to inform targeted educational interventions. A cross-sectional study was conducted at the Departments of Pediatric Outpatient and Emergency, Maltepe University Faculty of Medicine and enrolled 400 parents (200 healthcare-professionals, 200 non-professionals). A 52-item structured questionnaire, administered through face-to-face interviews, assessed socio-demographic characteristics, fever management knowledge, and attitudes toward febrile seizures (FS). Among the survey participants, 23% were nurses, 18% were physicians, 5% were technicians, 3% were other healthcare staff, and 1% were emergency medical technicians. Information sources differed significantly between groups, with groups varying in their reliance on medical personnel, the internet, books, relatives, and personal experience. Both groups most commonly used axillary temperature measurements. Thermometer ownership was similar, but definitions of normal temperature and fever thresholds differed significantly. Knowledge gaps and fever-related anxiety were evident in both healthcare and non-healthcare parents, contributing to inappropriate management practices. Tailored educational strategies addressing misconceptions about fever and FS are essential to promote evidence-based pediatric care and improve child health outcomes.

Keywords: Fever, febrile seizures, parents' attitudes

Introduction

Fever is among the most frequent causes of pediatric emergency visits, accounting for 20-30% of presentations worldwide and up to 71% in Türkiye[1-5]. Although fever represents a physiological immune response rather than a disease itself, misconceptions regarding normal body temperature, fever thresholds and appropriate management remain widespread[1,2,6]. These misconceptions often provoke excessive parental anxiety and lead to unnecessary or inappropriate interventions[6-9].

While most febrile illnesses in children are self-limiting viral infections, persistent fears of serious bacterial disease and potential complications continue to influence

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parental behavior[10-13]. The phenomenon known as "fever phobia," first described by Schmitt[14], reflects exaggerated concerns among caregivers and even healthcare providers, particularly regarding seizures, the most common seizure type in early childhood. Despite their generally benign prognosis, febrile seizures (FS) are frequently misinterpreted as indicators of brain damage or subsequent epilepsy, thereby prompting anxiety-driven management practices[15-19].

Previous studies conducted both internationally and in Türkiye have demonstrated persistent gaps in parental knowledge and attitudes toward childhood fever[10,20]. However, most existing research has focused on the general parent population, with limited attention to parents who are healthcare professionals. This distinction is clinically important, as healthcare-professional parents may be assumed to possess superior knowledge, yet simultaneously rely on outdated training, experiential practices, or heightened risk perception. Direct comparative data between parents who are healthcare professionals and those who are not remain limited.

Highlights

- This study compared the fever knowledge of healthcare and non-healthcare parents.
- Healthcare professionals had greater knowledge of fever but nonetheless held important misconceptions.
- Non-healthcare parents relied more on touch to detect fever and reported greater anxiety.
- Fear of febrile convulsions was widespread in both groups, contributing to the phenomenon of "fever phobia".
- Education is urgently needed to promote safe, evidence-based fever management in children.

Accordingly, the present study was designed to compare fever-related knowledge, attitudes, and management practices between healthcare-professional parents and non-healthcare-professional parents presenting to the pediatric outpatient and emergency services at Maltepe University Faculty of Medicine. By explicitly examining this underexplored comparison, the study aims to identify persistent misconceptions across both groups and to inform the development of targeted, evidence-based educational interventions for families and healthcare providers.

Materials and Methods

Study Design and Setting

This cross-sectional study was conducted between January and June 2017 at the Pediatric Outpatient and Emergency Departments of Maltepe University Faculty of Medicine, a tertiary care facility in İstanbul, Türkiye. The study recruited parents who were visiting the hospital with children aged 0-16 years. Parents accompanying children older than 16 years were excluded.

Participants

A total of 400 parents were enrolled, comprising 200 non-healthcare professionals (Group 1) and 200 healthcare professionals (Group 2). Healthcare professionals include physicians, nurses, technicians, and other medical staff. Eligibility criteria required that participants be the primary caregiver of the child and be able to provide informed consent. Recruitment occurred during routine clinical visits, and participation was voluntary. The category "other healthcare staff" included allied health professionals such as laboratory staff.

Variables and Data Collection

The primary outcomes were fever-related knowledge, attitudes, and practices, including temperature measurement methods, definitions of normal and febrile temperatures, management behaviors, and responses to FSs. Potential confounders, including socio-demographic characteristics and professional background, were recorded.

Data was collected via structured, face-to-face interviews using a 52-item questionnaire developed based on literature review and expert input. The questionnaire included:

- Socio-demographics (13 items: age, education, number of children, occupation, professional role, and experience for healthcare professionals).
- Fever knowledge and attitudes (28 items: temperature sites, fever definition, antipyretic use, anxiety levels).
- FS (11 items: recognition, perceived causes, appropriate interventions).

The same instrument and method of administration were used for both groups to ensure comparability. Socio-demographic characteristics of the participants and sources of information regarding fever are summarized in **Tables 1, 2,** respectively. Knowledge-based items were evaluated for consistency with widely accepted pediatric clinical definitions: operational definitions of fever thresholds are presented in **Table 3**, and fever management practices are detailed in **Table 4**. Definitions and references regarding FS are provided in **Table 5**.

Definitions of thresholds for normal body temperature, fever, and high fever were aligned with standard pediatric clinical references and international practice guidelines and took into account commonly accepted temperature cutoffs used in routine pediatric care.

Items related to FS were classified based on established clinical characteristics, including age dependency, association with febrile illness, and recommended diagnostic and therapeutic approaches. Classifications reflected the accepted understanding that simple FS occur in children within a specific age range, are associated with fever, and do not routinely require neuroimaging, electroencephalography, or prophylactic antiepileptic treatment in the absence of atypical features.

Bias and Study Size

To minimize interviewer bias, all interviews were conducted by trained research staff using standardized instructions. A sample size of 400 participants (200

per group) was targeted to ensure sufficient statistical power to detect significant differences in knowledge and practice variables between the two groups. Convenience sampling was used to facilitate recruitment during routine clinical visits; however, this non-probability sampling method may introduce selection bias and limit generalizability compared to random sampling techniques.

Ethical Considerations

The study was approved by the Clinical Research Ethics Committee of Maltepe University Faculty of Medicine (approval number: 2016-900-57, date: 29.12.2016). Institutional permissions were obtained, and written informed consent was secured from all participants prior to enrollment.

Statistical Analysis

Analyses were performed using IBM Corp. (2013) IBM SPSS Statistics for Windows, version 22.0. IBM Corp., Armonk, NY. Descriptive statistics were presented as frequencies and percentages for categorical variables, and as means ± standard deviation or medians (range) for continuous variables. Normality was assessed using the Shapiro-Wilk test.

Between-group comparisons were conducted using Pearson's chi-square test or Fisher's exact test for categorical variables. Independent Samples t-tests or Mann-Whitney U tests were applied to continuous variables, depending on the distribution. A two-tailed p-value <0.05 was considered statistically significant.

Results

Participants

During the study period, 400 parents were enrolled: 200 non-healthcare professionals (Group 1) and 200 healthcare professionals (Group 2). All approached participants who met the eligibility criteria consented to participate; therefore, no data on non-participation or attrition are available.

Demographic Characteristics

The mean age of mothers was 34.4±5.9 years and of fathers was 37.7±6.5 years. University-level education was reported by 54.5% of mothers (n=218) and 59.5% of fathers (n=235). Among participating healthcare professionals, the occupational distribution was as follows: nurses (n=94, 47%), physicians (n=73, 37%), technicians (n=18, 9%), other allied health workers (n=13, 6%), and emergency medical technicians (n=2, 1%). Detailed socio-demographic characteristics are presented in **Table 1**.

Fever Awareness and Measurement Practices

Tactile perception was used more frequently by Group 1 (n=136, 68%) than by Group 2 (n=102, 51%; p=0.001) to detect fever. Conversely, thermometer use was significantly higher among healthcare professionals (n=175, 87.5%) than among non-healthcare parents (n=131, 65.5%; p<0.001). Axillary temperature was the preferred site of measurement in both groups, with no significant differences between groups. Nearly all participants reported having a thermometer at home (Group 1: 96; Group 2: 98.5%), with digital axillary thermometers the most common (**Tables 2, 3**). The frequency of fever monitoring was similar across groups, occurring most often at 15-30 -minute intervals (**Figure 1**).

Knowledge of Fever Thresholds

Correct identification of normal body temperature was higher in Group 2 (n=150, 75%) than in Group 1 (n=93, 46.5%; p<0.001). Knowledge of fever thresholds was also greater among healthcare professionals (n=104, 52%) than among non-healthcare parents (n=82, 41%) (p=0.027). Surprisingly, fewer healthcare professionals correctly identified high fever thresholds (n=60, 30%) compared with non-healthcare parents (n=90, 45%; p=0.002) (**Table 3**).

Table 1.
Socio-demographic characteristics of the study population

		n	%	Mean	SD
Gender	Male	124	31		
	Female	276	69		
Marital status	Married	371	92.8		
	Single	29	7.3		
Mothers' age groups	22-35	234	58.5		
	36-40	110	27.5	34.4	5.9
	41 and above	56	14		
Fathers' age groups	25-38	233	58.3		
	39-43	98	24.5	37.7	6.5
	44 and above	68	17		
Mothers' education levels	Primary school	15	3.8		
	High school	104	26		
	Vocational school	63	15.8		
	University	218	54.5		
Fathers' education levels	Primary school	13	3.3		
	High school	103	26.1		
	Vocational school	44	11.1		
	University	235	59.5		
Number of children	One	233	58.3		
	Two	150	37.5		
	Three	16	4		
	Four	1	0.3		
Number of children under age five	None	127	31.8		
	One	228	57		
	Two	45	11.3		
Place of residence	İstanbul and districts	390	97.5		
	Other	10	2.5		

SD: Standard deviation

Table 2.
Comparison of fever information sources and temperature measurement practices by healthcare background

			Group 1		Group 2		
			n	%	n	%	p
Where do you get information about fever?	Doctor/nurse	Yes	181	90.5	165	82.5	0.019
		No	19	9.5	35	17.50	
	Books	Yes	47	23.5	94	47	p<0.001
		No	153	76.5	106	53	
	Magazines/newspapers	Yes	12	6	6	3	0.148
		No	188	94	194	97	
	Television	Yes	22	11	9	4.5	0.015
		No	178	89	191	95.5	
	Internet	Yes	116	58	50	25.5	p<0.001
		No	84	42	150	75	
	Family/relatives	Yes	59	29.5	11	5.5	p<0.001
		No	141	70.5	189	94.5	
	Experience with a previous child	Yes	43	21.5	18	9	p<0.001
		No	157	78.5	182	91	
How do you recognize fever?	By touching skin (tactile perception)	Yes	136	68	102	51	p<0.001
		No	64	32	98	49	
	By general appearance (irritable, crying, etc.)	Yes	56	28	76	38	0.033
		No	144	72	124	62	
	Measuring with thermometer at home	Yes	131	65.5	175	87.5	p<0.001
		No	69	34.5	25	12.5	
	Measurement at healthcare facility	Yes	13	6.5	20	10	0.203
		No	187	93.5	180	90	
Where do you measure fever?	Axillary	Yes	128	64	146	73	0.053
		No	72	36	54	27	
	Rectum	Yes	5	2.5	6	3	0.76
		No	195	97.5	194	97	
	Forehead	Yes	52	26	39	19.5	0.121
		No	148	74	161	80.5	
	Ear	Yes	46	23	47	23.5	0.906
		No	154	77	153	76.5	
	Oral	Yes	38	19	5	2.5	p<0.001
		No	162	81	195	97.5	

Table 3.
Comparison of thermometer use and fever threshold knowledge between groups

		Group 1		Group 2			
		n	%	n	%	x^2	p
Do you have a thermometer at home?		192	96	197	98.5	2.337	0.126
What type of thermometer do you use?	Non-contact forehead	44	22	35	17.5	1.278	0.258
	Axillary digital thermometer	110	55	130	65	4.167	0.041
	Tympanic (ear) thermometer	59	29.5	53	26.50	0.446	0.504
	Mercury glass thermometer	22	11	19	9.50	0.245	0.621
What is the normal body temperature?	Correct answer*	93	46.5	150	75	34.065	p<0.001
What temperature is considered a fever?	Correct answer*	82	41	104	52	4.864	0.027
What temperature is considered a high fever?	Correct answer*	90	45	60	30	9.600	0.002

*: Responses regarding normal body temperature, fever, and high fever were evaluated based on widely accepted pediatric clinical definitions. Normal body temperature was considered to lie approximately between 36.5-37.5 °C, depending on measurement site. Fever was defined as a body temperature of ≥38.0 °C, in line with international pediatric consensus. High fever was operationally defined as ≥39.0 °C, consistent with pediatric clinical practice guidelines, with temperatures ≥40.0 °C considered very high fever in some clinical contexts[21]

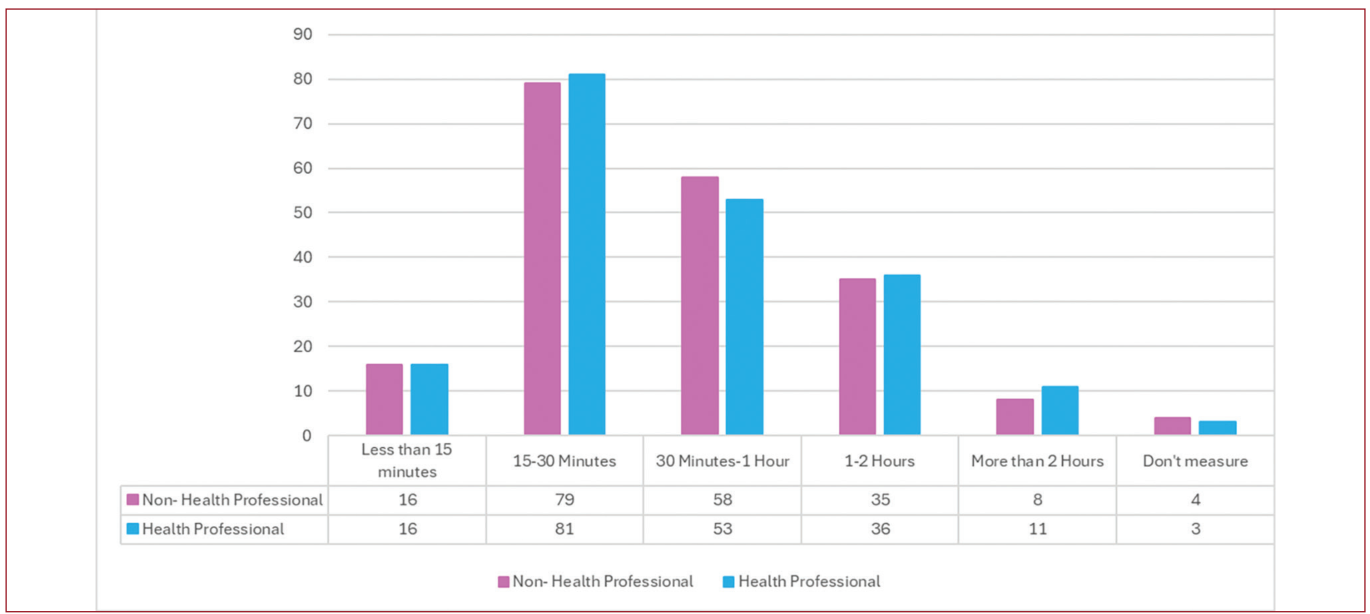

Figure 1. Comparison of the frequency of fever measurement between healthcare professionals and non-healthcare professionals

Table 4.
Comparison of fever management practices and antipyretic use among groups

		Group 1		Group 2		
		n	%	n	%	p
What do you do when your child has a high fever?	Cover them/dress in layers	2	1	5	2.5	0.253
	Apply cold compresses	98	49	168	84	p<0.001
	Give a shower	160	80	165	82.5	0.522
	Remove clothing	48	24	99	49.5	p<0.001
	Give antipyretic medication	158	79	159	79.5	0.902
	Give antibiotics	3	1.5	16	8	0.002
	Apply cloth with cologne	8	4	4	2	0.241
	Apply cloth with vinegar	28	14	21	10.5	0.286
	Make them drink water	74	37	77	38.5	0.757
Do you give a shower during high fever?	Yes	168	84	178	89	0.143
At what temperature do you give a shower?	37 °C	3	1.5	1	0.5	0.269
	38 °C	32	16	37	18.5	
	38.5 °C	57	28.5	75	37.5	
	39 °C	64	32	55	27.5	
	40 °C	12	6	9	4.5	
	Not high fever	32	16	23	11.50	
Do you give antipyretic medication during high fever?	Yes	174	87	180	90	0.347
When do you give antipyretic medication?	When they feel hot to touch	17	8.5	14	7	0.575
	If they have chills or shivering	37	18.5	26	13	0.131
	When measured high with thermometer	174	87	179	89.5	0.438
	If they look unwell	21	10.5	19	9.5	0.739
At what temperature do you give antipyretic medication?	37 °C	19	9.5	2	1	p<0.001
	38 °C	68	34	92	46.7	
	38.5 °C	67	33.5	73	37.1	
	39 °C	25	12.5	12	6.1	
	Do not give medication	21	10.5	18	9.1	
Do you always have antipyretic medication at home?		194	97	190	95	0.307

Fever Management Behaviors

Antipyretic use was the most common management strategy in both groups (Group 1: n=158, 79%; Group 2: n=159, 79.5%; p=0.902), followed by tepid sponging and showering (**Table 4**). Cold applications were significantly more frequent among healthcare professionals (n=168, 84%) than among non-healthcare parents (n=98, 49%; p<0.001). Antibiotic use was low overall but was higher in Group 2 (n=16, 8%) than in Group 1 (n=3, 1.5%; p=0.002).

Regarding the timing of antipyretic administration, most parents reported initiating treatment at ≥38 °C (Group 1: n=188, 94%; Group 2: n=182, 91%); however, definitions of fever thresholds varied significantly. Both groups primarily relied on physician recommendations for determining antipyretic dosages (**Table 4**).

Attitudes and Beliefs about Fever

A larger proportion of healthcare professionals (n=173, 86.5%) perceived fever as harmful than did non-healthcare parents (n^2=158, 79%). The most frequently cited complications were FSs, brain damage, dehydration, and hepatic or renal injury.

Knowledge and Misconceptions Regarding Febrile Seizures

Knowledge of FSs was significantly higher in Group 2. Specifically, more healthcare professionals recognized the age dependency of FSs (n=144, 72%) than did non-healthcare parents (n=65, 32.7%; p<0.001) (**Table 5**). Similarly, understanding of the temperature thresholds for FSs was better among healthcare professionals (n=72, 36%) than among non-healthcare parents (n=47, 23.5%; p=0.006).

However, misconceptions were common in both groups: the belief that FSs inevitably cause brain damage was reported by 71.4% of non-healthcare parents (n=142) and 74.0% of healthcare professionals (n=148) (p=0.597). Knowledge that antiepileptic treatment and neuroimaging are not routinely required was more prevalent in healthcare professionals (antiepileptic treatment: n=136 (68%) vs n=80 (40.2%); p<0.001; neuroimaging: n=64 (32%) vs n=23 (11.6%); p<0.001).

When asked about emergency management practices during an FS, several differences were observed between healthcare professional parents (Group 2) and non-healthcare parents (Group 1). No statistically significant differences were observed between groups regarding the placement of the child in water (35.5% vs. 44%, p=0.1), calling emergency medical services

Table 5.
Knowledge of febrile seizures and their association with epilepsy among groups

		Group 1		Group 2		
		n	%	n	%	p
At what temperature do children have febrile seizures?	38 °C and above	3	1.5	3	1.5	0.054
	38.5 °C and above	5	2.5	8	4	
	39 °C and above	44	22.1	41	20.5	
	40 °C and above	100	50.3	76	38	
	Can occur at any temperature	47	23.6	72	36	
	Correct	47	23.5	72	36	0.006
	Incorrect	153	76.5	128	64	
Is febrile seizure age-dependent?*	Yes	65	32.7	144	72	p<0.001
	No	134	67.3	56	28	
Do you think febrile seizure is a type of epilepsy?	Yes	21	10.6	23	11.5	p<0.001
	No	92	46.2	147	73.5	
	No opinion	86	43.2	30	15	
Do you think febrile seizures lead to epilepsy later?	Yes	46	23.1	70	35	p<0.001
	No	28	14.1	71	35.5	
	No opinion	125	62.8	59	29.5	
Do you think febrile seizures cause brain damage?	Yes	142	71.4	148	74	p<0.001
	No	12	6	32	16	
	No opinion	45	22.6	20	10	
Should children who experience febrile seizures be given epilepsy medication?	Yes	7	3.5	16	8	p<0.001
	No	80	40.2	136	68	
	No opinion	112	56.3	48	24	
Should children who experience febrile seizures undergo brain imaging/EEG (MRI-EEG)?*	Yes	56	28.1	86	43	p<0.001
	No	23	11.6	64	32	
	No opinion	120	60.3	50	25	

*: Knowledge regarding FSs was evaluated according to accepted pediatric neurology definitions and guideline-based management principles. FSs were considered to be associated with febrile illness, typically at temperatures ≥38.0 °C, although no single temperature threshold is universally required for seizure occurrence[22]. FSs are age-dependent events, most commonly occurring between 6 and 60 months of age[23]. Routine prophylactic antiepileptic drug use and routine neuroimaging or electroencephalography are not recommended in the evaluation of children with simple FSs in the absence of atypical features[24,25]. MRI: Magnetic resonance imaging, EEG: Electroencephalography, FS: Febrile seizure

(55.5% vs. 47.5%, p=0.13), administering antipyretic medication (28.5% vs. 23.5%, p=0.30), or immediately transporting the child to the nearest healthcare facility (79% vs. 83.5%, p=0.31). Rarely reported practices, including shaking the child (0.5% vs. 2%, p=0.37), splashing water or cologne on the face (4.5% vs. 6%, p=0.65), and providing mouth-to-mouth ventilation (1% in both groups, p=1), did not differ significantly between groups.

Lateral positioning of the child was reported more frequently by Group 2 than by Group 1 (34% vs. 6%, p<0.001). Similarly, performing cardiopulmonary resuscitation was reported more frequently in Group 2 than in Group 1 (24.5% vs. 5; p<0.001). Attempting to keep the child's mouth open during the event was also reported more frequently in Group 2 (31.5% vs. 18%; p=0.003).

Discussion

Fever remains one of the most frequent reasons for pediatric emergency visits worldwide. Although a physiological response, most commonly to self-limiting viral infections, it continues to provoke considerable anxiety among parents and healthcare professionals. This phenomenon, historically termed "fever phobia" Schmitt[14], stems from misinformation or an inadequate understanding of the causes and implications of fever.

Previous studies, including those by Betz and Grunfled,[6] Crocetti et al.[10] and Esenay et al.[8], have shown that parents often engage in inappropriate fever management practices because of inaccurate or incomplete knowledge. The findings of the present study align with this literature, demonstrating that although healthcare professional parents (Group 2) exhibited higher levels of knowledge in certain areas, misconceptions persisted in both groups. The presence of such gaps even among trained healthcare professionals highlights that professional background alone may not ensure guideline-consistent fever management and underscores the need for ongoing, structured educational interventions.

A major strength of this study is its large, balanced sample of 400 participants, which allows meaningful comparisons between healthcare-professional parents and non-healthcare parents. A substantial proportion of parents in both groups (Group 1: 79; Group 2: 86.5%) perceived fever as harmful, most commonly because of concerns about FSs. These perceptions closely mirror international findings, including those reported by Huang et al.[15], in which FSs were frequently misinterpreted as indicating brain damage or epilepsy.

Parents who are healthcare professionals demonstrated greater accuracy in identifying normal body temperature than non-healthcare parents, which is consistent with previous reports suggesting that higher educational attainment or clinical exposure may be associated with improved fever-related knowledge. Nevertheless, nearly one-quarter of healthcare professionals failed to correctly identify normal body temperature, suggesting that knowledge decay or outdated information may persist even among medically trained individuals.

With respect to fever management practices, both groups commonly reported strategies generally regarded as appropriate, such as the administration of paracetamol or tepid sponging. However, the present study identified higher rates of practices not routinely recommended by current guidelines (such as cold applications or antibiotic use) among parents who are healthcare professionals (**Table 4**). Rather than implying causality, this finding may reflect the complex interaction between professional training, clinical experience, and habitual practices. In addition, frequent home temperature monitoring, sometimes at 15-30-minute intervals, was observed in both groups and appeared more common among healthcare professionals (**Figure 1**), suggesting a tendency toward practicality in clinical settings.

Importantly, our findings support earlier research by Dinçer and Arslan[26] and Peetoom et al.[27], which emphasized that even healthcare professionals lack consistent training in evidence-based fever management. Despite clinical experience, certain misconceptions (such as the perceived need to administer antipyretics at temperatures below 38.5 °C) remain prevalent, indicating that experiential learning may sometimes outweigh guideline-based recommendations.

Concerns regarding FSs were particularly prominent. Regarding FSs, 71.4% of Group 1 believed that FSs cause brain damage, a fear echoed in earlier studies[10,15,28]. In our sample, only 36% of Group 2 correctly identified the body temperature at which FS typically occurs, and only 68% knew that neuroimaging or antiepileptics are not routinely required for FS management (**Table 3**). These findings highlight persistent knowledge gaps and support the need for targeted family-centered education that emphasizes evidence-based seizure management principles.

Our study also revealed socio-demographic nuances. Higher education correlated with better knowledge of body temperature norms, but not necessarily with improved understanding of fever thresholds or FS management. This observation suggests that educational interventions should be tailored not only to professional background but also to educational level and parental experience to effectively address both knowledge- and practice-related gaps.

Study Limitations

This study is subject to several limitations inherent to its cross-sectional, survey-based design. Data were collected using a structured questionnaire administered in face-to-face interviews, rendering the findings dependent on the accuracy of participants' recall and their interpretation of the survey items. Such reliance on self-reported information introduces the potential for recall bias, social desirability bias, and misinterpretation of questions, which may have influenced the validity of the responses. The cross-sectional methodology permits only the characterization of parental knowledge, attitudes, and practices at a single point in time, thereby precluding any inference of causality or temporal change. The heterogeneous composition of the healthcare professional group may have masked differences between specific occupational subgroups;

however, subgroup analyses were not feasible due to limited sample sizes. Additionally, the recruitment of participants from a defined geographic and sociocultural setting, coupled with voluntary participation, may have resulted in selection bias and may have limited the generalizability of the findings to broader populations. Finally, because the dataset was collected in 2017, the results should be interpreted in the context of the prevailing public health environment and clinical practices of that period. While this temporal distance may limit immediate applicability, it confers value as a historical benchmark for longitudinal comparison and trend analysis in future research.

Conclusion

This study confirms that both healthcare and non-healthcare parents experience significant anxiety and misunderstandings about fever, despite widespread access to medical services. Misconceptions, particularly about FS, persist across educational levels and professions. Although healthcare professionals exhibited superior overall knowledge, critical gaps remained, particularly regarding fever thresholds and FS management.

To bridge these gaps, we recommend:

- Developing structured educational modules during pediatric check-ups, targeting both parents and frontline healthcare workers.

- Including visual guides and infographics to correct misconceptions about FS.

- Emphasizing evidence-based fever thresholds and management protocols in nursing and residency training.

- Establishing public health campaigns to dispel "fever phobia" and encourage rational fever management.

By implementing these interventions, families and healthcare professionals can collaborate more effectively to provide safe, informed, and confidently delivered care to febrile children, ultimately reducing unnecessary emergency visits and improving pediatric health outcomes.

Ethics

Ethics Committee Approval: The study was approved by the Clinical Research Ethics Committee of Maltepe University Faculty of Medicine (approval number: 2016-900-57, date: 29.12.2016).

Informed Consent: Institutional permissions were obtained, and written informed consent was secured from all participants prior to enrollment.

Footnotes

Author Contributions: Özomay Baykal G: Concept, Design, Data Collection or Processing, Analysis or Interpretation, Literature Search, Writing; Tanju İA: Concept, Design, Writing.

Conflict of Interest: The authors declare no conflicts of interest.

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