

Knowledge, Attitudes and Applications of Fathers with Children Aged Group 0-6 Who Were Taken to An Emergency Service with Complaints of High Fever Regarding Fever Management

Yüksek Ateş Şikayeti İle Acil Servise Getirilen 0-6 Yaş Grubu Çocuğu Olan Babaların Ateş Yönetimine İlişkin Bilgi, Tutum ve Uygulamaları

Leyla Zengin Aydın 

ABSTRACT

Purpose: The present study sought to determine the knowledge, attitudes and applications of fathers with children aged 0-6 years who were taken to an emergency service with complaints of high fever regarding fever management.

Methods: The target population of the study comprised fathers who applied to the Maternity and Children Diseases Hospital Pediatric Emergency Service in a province in the east of Turkey between January and September 2019. The sample of the study consisted of 196 fathers who agreed to participate in the study. The data were collected using a questionnaire in which the introductory characteristics of the fathers and the fathers' knowledge, attitude and practices regarding fever management were questioned.

Results: Of the fathers included within the scope of the study, 47.4% were aged 20-29 years, 88.8% had bachelor's degree and 67.3% had equal income to expense. The mean age of the children of the fathers who took part in the study was 3.28±1.50 years and the average number of children was 2.60±1.86. In the present study, the age groups did not affect the knowledge, attitudes and applications of the fathers regarding fever management ($p>0.05$), while their educational level and income status were effective ($p<0.05$).

Conclusion: The study found that educational level and income level of the fathers affected their knowledge, attitudes and applications. It is possible to recommend that fathers be included in the trainings on knowledge, attitudes, and applications regarding fever management in primary, secondary and tertiary healthcare institutions.

Keywords: Applications, Attitude, Child, Father, High Fever, Knowledge

Received/Geliş: 12.08.2022
Accepted/Kabul: 14.11.2022
Published Online: 16.12.2022

Cite as: Zengin Aydın L. Knowledge, attitudes and applications of fathers with children aged group 0-6 who were taken to an emergency service with complaints of high fever regarding fever management. Jaren. 2022;8(3):140-148.

Leyla Zengin Aydın

Dicle University, Diyarbakir Ataturk
Faculty of Health Sciences, Department
of Nursing, Diyarbakir, Turkey
✉ leyla_zen@hotmail.com
ORCID: 0000-0003-3905-3428

Öz

Amaç: Bu çalışma, yüksek ateş şikayeti ile acil servise getirilen 0-6 yaş grubu çocukları olan babaların ateş yönetimine ilişkin bilgi, tutum ve uygulamalarının belirlenmesi amacıyla yapılmıştır.

Yöntem: Araştırmanın evrenini, Türkiye Doğusunda bir ilin Kadın Doğum ve Çocuk Hastalıkları Hastanesi Çocuk Acil Servisinde Ocak-Eylül 2019 tarihleri arasında başvuran babalar oluşturmuştur. Araştırmanın örneklemini çalışmaya katılmayı kabul eden 196 baba oluşturmuştur. Veriler, babaların tanıtıcı özelliklerinin ve babaların ateş yönetimine ilişkin bilgi, tutum ve uygulamalarının sorgulandığı bir anket ile toplanmıştır.

Bulgular: Araştırma kapsamına alınan babaların %47.4'ünün 20-29 yaş arasında olduğu, %88.8'inin lisans mezunu olduğu, %67.3'ünün gelir giderine eşit olduğu tespit edilmiştir. Araştırmaya katılan babaların çocuk yaş ortalaması 3.28±1.50, çocuk sayısı ortalaması 2.60±1.86 arasında olduğu belirlenmiştir. Araştırmamızda babaların yaş grupları ateş yönetimi ile ilgili bilgi, tutum ve uygulamaların etkilenmediği tespit edilirken ($p>0.05$) babaların eğitim düzeyi ve gelir durumunun ise etkili olduğu saptanmıştır ($p<0.05$).

Sonuç: Babaların eğitim düzeyi ve gelir düzeyinin bilgi, tutum ve uygulamalarını etkilediği bulunmuştur. Birinci, ikinci ve üçüncü basamak sağlık kuruluşlarında ateş yönetimine ilişkin bilgi, tutum ve uygulamalara yönelik verilen eğitimlere babaların katılımının sağlanması önerilebilir.

Anahtar kelimeler: Baba, Bilgi, Çocuk, Tutum, Uygulamalar, Yüksek Ateş

INTRODUCTION

Fever which is defined as a defense mechanism of the body is one of the common symptoms encountered in children aged 0-6 years⁽¹⁻³⁾. A variety of complications develop depending on this symptom. In case of an increase in the child's temperature, parents apply to a healthcare organization to reduce the fever as soon as possible and to prevent the development of complications^(1,4,5). In addition, the possibility of the development of these complications causes uneasiness and fear in parents. Parents apply inappropriate and even harmful methods to their children due to the uneasiness and panic they experience during a fever⁽⁶⁻⁸⁾. Besides right methods used for fever management at home such as warm water application and warm water shower, parents may use wrong methods such as cold water application and cold water shower⁽⁸⁻¹⁰⁾. Also, one of these wrong applications may be not administering the medications at the right dose and frequency to reduce the fever. Factors such as educational level, experiences and social learnings affect the application of these methods to the infant and the child. Wrong or late fever management by parents at home may lead to problems such as increase in heart rate and respiratory rate, headache, stomach ache, vomiting, exhaustion and convulsion⁽¹⁰⁻¹³⁾.

Noticing fever in the early period in infancy and childhood and using accurate methods at the right time and in appropriate ways may prevent complications^(10,14,15). Therefore, fever is one of the signs for which parents often need healthcare services. Determining the knowledge and attitudes of parents regarding fever management and fixing their inadequacies and mistakes may make important contributions to the control of childhood fever^(2,16-19).

The studies conducted have reported that informing about expression of fever, harms of fever, how to use a thermometer and follow-up and management of fever reduce the anxiety that parents experience due to fever^(8,16,17,20). Parents' comprehension of the importance of fever may determine their anxieties, fears and reactions about child care. Examining the literature, most studies evaluate the knowledge, attitudes and approaches of mothers regarding fever^(8,11,20,21). It is possible to consider this condition an ignorance of the presence of fathers in child care. In child care, the responsibility may be solely in

the father when the mother works, gets sick, dies and parents divorce. Therefore, it is necessary to determine the applications of fathers regarding fever management and overcome the deficiencies and mistakes. The present study is of particular importance because it sought to determine the applications of fathers of infants and children with working mothers regarding fever. Accordingly, the researcher conducted the study to determine the knowledge, attitudes and applications of fathers with children aged 0-6 years who were taken to an emergency service with complaints of high fever regarding fever management.

MATERIALS AND METHODS

Type of the Study

The study was carried out in a descriptive and cross-sectional design to determine the knowledge, attitudes and applications of fathers with children aged 0 to 6 years who are taken to emergency service with complaints of high fever regarding fever management.

Time and Place of the Study

The study was conducted in the Maternity and Children Hospital Pediatric Emergency Service in a province in the east of Turkey between January and September 2019.

Population and Sample of the Study

The population of the cross-sectional study comprised fathers with children aged 0-6 years who were taken to a pediatric emergency service with complaints of high fever between January and September 2019. The study was completed with 196 fathers who met the inclusion criteria and agreed to take part in the study without choosing sample.

Inclusion criteria were; (1) Adult fathers aged 18 years and older; (2) Fathers who established oral communication.

Data Collection Tools

Information Form: The researcher collected the data using a survey form which was created in line with the literature and questioned the socio-demographic characteristics of the fathers and their knowledge, attitudes and applications regarding fever management^(5,8,10,17,19,22,23). The form had open-ended questions which questioned introductory

characteristics of the fathers such as age, educational background, level of income, age and number of children and the state of the fathers to know how harmful high fever was, know the harms of high fever, notice high fever, know the parts of the body to take the temperature, know the limits of high fever, know the initial interventions to perform during a high fever, know the frequency of measuring high fever, know the frequency of administering antipyretics and know where to keep antipyretics.

Collection of the Data

The researcher informed the fathers of the children aged 0-6 years who were taken to the emergency service with complaints of high fever about the study purpose and collected the data using a question form via face-to-face interview method. However, as the fathers had fear and uneasiness, a researcher completed the question form in a waiting room in the emergency unit via face-to-face interview method after the children had been examined and the fathers' anxiety had decreased. In the emergency service which provided uninterrupted service 24 hours and applied the shift system in the daytime, at night and at the weekend, the researcher collected the data mainly at night and at the weekend.

Data Analysis

The statistical analyses of the data were performed via the SPSS 18 (Statistical Package for Social Science) package program. Numbers and percentages were used for the socio-demographic data of the fathers. The chi-square test was conducted for the statistical analysis of the data. All findings were handled at the level of $p < 0.05$.

Ethical Statement

Ethics committee approval for the study was obtained from Dicle University Medical Faculty Non-interventional Clinical Research Ethics Committee on 06.06.2018 (No:214). In addition written institutional permission was obtained from the Maternity and Children Hospital where the study was conducted on 30.05.2018 (Document No:58146266-000-10714) and written and oral consent was received from the fathers who took part in the study.

RESULTS

Of the fathers who took part in the study, 47.4% were aged 20-29 years, 88.8% were university graduate and 67.3% had equal income to expense. Mean age of the children of the fathers who took part in the study was 3.28 ± 1.50 years and their average number was 2.60 ± 1.86 (Table 1).

In the present study, there was no significant difference between the age groups of the fathers in terms of the questions ($p > 0.05$) (Table 2). In the study, there was a significant difference between the educational levels of the fathers in terms of the question "How do you tell if there is high fever?" ($p < 0.05$). However, there was no significant difference in terms of other questions ($p > 0.05$) (Table 3).

In the current study, there was a significant difference between the income statuses of the fathers in terms of the questions "Is high fever harmful?", "What is the limit of high fever?", "How often are antipyretics administered?" and "Where should antipyretics be kept?" ($p < 0.05$). However, there was no significant difference in terms of other questions ($p > 0.05$) (Table 4).

Table 1. Sociodemographic Characteristics of the Participants (n=196)

Characteristics	Number	%
Age		
20-29 years	93	47.4
30-39 years	72	36.7
40-50 years	31	15.8
Educational Level		
High school	22	11.2
University graduate	174	88.8
Income Status		
Income more than expense	16	8.2
Income equal to expense	132	67.3
Income less than expense	48	24.5
Age of Children (Mean±SD)	3.28 ± 1.50	
Number of Children (Mean±SD)	2.60 ± 1.86	

SD=Standard Deviation

Table 2. Impact of the Age Groups of the Fathers on Their Knowledge, Attitudes and Applications Regarding High Fever Management (n=196)

Age Groups	20-29 n (%)	30-39 n (%)	40-50 n (%)	χ^2	p
Is high fever harmful?					
Yes	58(62.4)	50(69.4)	20(64.5)	0.908	0.635
No	35(37.6)	22(30.6)	11(35.5)		
<i>Total</i>	93(100)	72(100)	31(100)		
What are the harms of high fever?					
Having a seizure	43(46.2)	33(45.8)	19(61.3)	4.826	0.306
Getting sick	22(23.7)	22(30.6)	8(25.8)		
Damaging the brain	28(30.1)	17(23.6)	4(12.9)		
<i>Total</i>	93(100)	72(100)	31(100)		
How do you tell if there is high fever?					
Body temperature	29(31.2)	26(36.1)	12(38.7)	4.835	0.565
Skin touch	37(39.8)	25(34.7)	10(32.3)		
Coldness on hands and feet	27(29)	21(29.2)	9(29)		
<i>Total</i>	93(100)	72(100)	31(100)		
Which part of the body do you use to take the temperature?					
Armpits	37(39.8)	28(38.8)	14(45.2)	3.062	0.801
Ears	36(38.7)	23(31.9)	10(32.2)		
Forehead	20(21.5)	21(29.2)	7(22.6)		
<i>Total</i>	93(100)	72(100)	31(100)		
What is the limit of high fever?					
37°C or above	32(34.4)	26(36.1)	11(35.5)	3.579	0.733
38°C or above	28(30.1)	22(30.6)	6(19.3)		
39°C or above	33(35.5)	24(33.3)	14(45.2)		
<i>Total</i>	93(100)	72(100)	31(100)		
What are initial interventions to perform in high fever?					
Administering antipyretics	21(22.6)	15(20.9)	4(12.9)	4.109	0.662
Giving a warm shower	34(36.5)	32(44.4)	17(54.8)		
Taking off clothes	26(30)	18(25)	6(19.4)		
Going to a healthcare organization	12(12.9)	7(9.7)	4(12.9)		
<i>Total</i>	93(100)	72(100)	31(100)		
What is the frequency of measuring high fever?					
Every 15 minutes	42(45.2)	39(54.2)	11(35.5)	8.975	0.175
Every 30 minutes	31(33.3)	26(36.1)	11(35.5)		
Every 45 minutes	20(21.5)	7(9.7)	9(29)		
<i>Total</i>	93(100)	72(100)	31(100)		
How often are antipyretics administered?					
As the doctor indicates	13(13.9)	10(13.9)	9(29)	7.379	0.287
Every four hours	61(65.6)	51(70.9)	14(45.2)		
According to the recommendation of my relatives	19(20.4)	11(15.2)	8(25.8)		
<i>Total</i>	93(100)	72(100)	31(100)		
Where should antipyretics be kept?					
In a refrigerator	44(47.3)	30(41.7)	14(45.2)	2.499	0.869
At 25°C and below	32(34.4)	32(44.4)	11(35.5)		
In a medicine chest	17(18.3)	10(13.9)	6(19.4)		
<i>Total</i>	93(100)	72(100)	31(100)		

χ^2 =Chi-square test

Table 3. Impact of the Educational Levels of the Fathers on Their Knowledge, Attitudes and Applications Regarding High Fever Management (n=196)

Educational Levels	High School n (%)	Bachelor's degree n (%)	χ²	p
Is high fever harmful?				
Yes	11(50)	117(67.2)	2.562	0.109
No	11(50)	57(32.8)		
<i>Total</i>	22(100)	174(100)		
What are the harms of high fever?				
Having a seizure	12(54.6)	83(47.7)	1.730	0.421
Getting sick	7(31.8)	45(25.9)		
Damaging the brain	3(13.6)	46(26.4)		
<i>Total</i>	22(100)	174(100)		
How do you tell if there is high fever?				
Body temperature	4(18.1)	63(36.2)	8.504	0.037
Skin touch	6(27.3)	66(37.9)		
Coldness on hands and feet	12(54.6)	45(25.9)		
<i>Total</i>	22(100)	174(100)		
Which part of the body do you use to take the temperature?				
Armpits	9(40.9)	70(40.2)	0.068	0.995
Ears	9(40.9)	71(40.8)		
Forehead	4(18.2)	33(20)		
<i>Total</i>	22(100)	174(100)		
What is the limit of high fever?				
37°C or above	9(40.9)	60(34.5)	6.579	0.087
38°C or above	3(13.6)	53(30.5)		
39°C or above	10(45.5)	61(35)		
<i>Total</i>	22(100)	174(100)		
What are initial interventions to perform in high fever?				
Administering antipyretics	5(22.7)	35(20.1)	4.167	0.244
Giving a warm shower	13(59.1)	70(40.2)		
Taking off clothes	3(13.6)	47(27.1)		
Going to a healthcare organization	1(4.6)	22(12.6)		
<i>Total</i>	22(100)	174(100)		
What is the frequency of measuring high fever?				
Every 15 minutes	6(27.3)	86(49.4)	5.946	0.114
Every 30 minutes	10(45.5)	58(33.4)		
Every 45 minutes	6(27.3)	30(17.2)		
<i>Total</i>	22(100)	174(100)		
How often are antipyretics administered?				
As the doctor indicates	2(9.1)	30(17.2)	7.509	0.057
Every four hours	11(50)	115(66.1)		
According to the recommendation of my relatives	9(40.9)	29(16.7)		
<i>Total</i>	22(100)	174(100)		
Where should antipyretics be kept?				
In a refrigerator	7(31.8)	81(46.6)	2.411	0.492
At 25°C and below	10(45.5)	65(37.3)		
In a medicine chest	5(22.7)	28(16.19)		
<i>Total</i>	22(100)	174(100)		

χ²=Chi-square test

Table 4. Impact of the Income Statuses of the Fathers on Their Knowledge, Attitudes and Applications Regarding High Fever Management (n=196)

Income Statuses	Income more than expense n (%)	Income equal to expense n (%)	Income less than expense n (%)	χ^2	p
Is high fever harmful?					
Yes	14(87.5)	95(71.9)	19(39.5)	20.083	0.000
No	2(12.5)	37(28.1)	29(60.5)		
<i>Total</i>	16(100)	132(100)	48(100)		
What are the harms of high fever?					
Having a seizure	8(50)	68(51.5)	19(39.5)	1.730	0.589
Getting sick	3(18.8)	33(25)	16(33.3)		
Damaging the brain	5 (31.2)	31(23.5)	13(27.2)		
<i>Total</i>	16(100)	132(100)	48(100)		
How do you tell if there is high fever?					
Body temperature	6(37.6)	51(38.6)	10(20.8)	11.660	0.070
Skin touch	5(31.2)	51(38.6)	16(33.4)		
Coldness on hands and feet	5(31.2)	30(22.8)	22(45.8)		
<i>Total</i>	16(100)	132(100)	48(100)		
Which part of the body do you use to take the temperature?					
Armpits	6(37.6)	56(42.4)	17(35.4)	7.179	0.305
Ears	5(31.2)	41(31.1)	23(47.9)		
Forehead	5(31.2)	31(23.5)	8(16.7)		
<i>Total</i>	16(100)	132(100)	48(100)		
What is the limit of high fever?					
37°C or above	2(12.5)	43(32.5)	24(50)	14.093	0.029
38°C or above	7(43.7)	42(31.9)	7(14.6)		
39°C or above	7(43.7)	47(35.6)	17(35.4)		
<i>Total</i>	16(100)	132(100)	48(100)		
What are initial interventions to perform in high fever?					
Administering antipyretics	6(37.5)	28(21.2)	6(12.5)	7.490	0.278
Giving a warm shower	7(43.7)	57(43.2)	19(39.5)		
Taking off clothes	2(12.5)	31(23.5)	17(35.4)		
Going to a healthcare organization	1(6.25)	16(12.1)	6(12.5)		
<i>Total</i>	16(100)	132(100)	48(100)		
What is the frequency of measuring high fever?					
Every 15 minutes	5(31.2)	70(53.0)	17(35.4)	9.008	0.173
Every 30 minutes	6(37.6)	44(33.3)	18(37.6)		
Every 45 minutes	5(31.2)	18(13.7)	13(27)		
<i>Total</i>	16(100)	132(100)	48(100)		
How often are antipyretics administered?					
As the doctor indicates	3(18.7)	26(19.7)	3(6.3)	14.293	0.027
Every four hours	12(75)	86(65.1)	28(58.3)		
According to the recommendation of my relatives	1(6.25)	20(15.1)	17(35.4)		
<i>Total</i>	16(100)	132(100)	48(100)		
Where should antipyretics be kept?					
In a refrigerator	3(18.7)	68(51.5)	17(35.4)	13.572	0.035
At 25°C and below	9(56.2)	44(33.3)	22(45.8)		
In a medicine chest	4(25)	20(15.1)	9(18.8)		
<i>Total</i>	16(100)	132(100)	48(100)		

χ^2 =Chi-square test

DISCUSSION

High fever has harmful impacts on the body in children aged 06 years and thus, fever has to be reduced ^(3,9,24). Possible complications should be prevented by using accurate applications in the fever management of caregivers ^(9,13,19,25). However, parents' lack of knowledge related to fever management may lead to harmful applications. In this section, since the findings of the present study concerning the knowledge, attitudes and applications of the fathers regarding fever management were not the same as the sample group, the researcher discussed the findings of the study with the findings of different sample groups.

In the current study, the fathers with different age groups, educational levels and income statuses stated that high fever was harmful for children. In addition, the situation creating the greatest uneasiness among the fathers related to their children was having a seizure due to high fever. A study conducted by Yiğitalp on mothers' knowledge and applications regarding fever found that the greatest concern about the harms of fever in children was having a seizure ⁽²¹⁾. For a good fever management in childhood, it is primarily necessary to take the temperature with appropriate and accurate methods. Fever should be measured using an appropriate thermometer in the area to be measured. In the present study, most of the fathers stated that they did fever evaluation by touching the skin. The studies conducted show that parents evaluate fever by measuring in a subjective way like touching the skin ^(6,21,26).

For fever measuring in children, it is possible to choose temporal, tympanic, oral, axillary and rectal areas. For an accurate fever measuring, it is necessary to use an appropriate thermometer in the area to be measured. In the current study, the fathers stated that they usually used the armpit area for fever measuring. Examining the studies conducted, the armpit is an area chosen the most for fever measuring ^(6,11,20).

In the present study, the description of body temperature as fever varied according to the age groups, educational levels and income statuses of the fathers. They stated that all temperatures at 37°C or above were fever. Halicioğlu et al. (2011) defined the temperatures at 37°C or above to be high fever ⁽⁵⁾. Temel et al. (2016) defined the temperatures at 39°C or above to be high fever ⁽²⁷⁾. Initial intervention

to perform during a high fever is crucial for fever management. In the present study, the fathers chose a warm shower as initial intervention during a high fever. The studies conducted are in agreement with the findings of the present study ^(21,27). Excessive anxiety that parents experience because of a high fever affects the use of antipyretics at the accurate dose and frequency. In the current study, the fathers stated that the frequency of using antipyretics was every four hours. The studies conducted by Kilicaslan et al. (2018) and Yiğitalp (2019) found that mothers administered antipyretics to their children every four hours and less often for fever management ^(21,28).

The present study found no significant difference between the age groups of the fathers in terms of the questions. In the study, there was a significant difference between the educational levels of the fathers in terms of the question "How do you tell if there is high fever?". However, there was no significant difference in terms of other questions. In the present study, there was a significant difference between the income statuses of the fathers in terms of the questions "Is high fever harmful?", "What is the limit of high fever?", "How often are antipyretics administered?" and "Where should antipyretics be kept?". However, there was no significant difference in terms of other questions.

Examining the studies on high fever management, accurate applications reduce and even prevent the development of complications related to fever in children ^(8,19,22,23). A study conducted by Çatakli et al. (2012) found that there was a significant difference between the frequency of mothers to administer antipyretics and their educational background, which was in agreement with the findings of the present study. In addition, the present study determined that as the mothers' educational level increased, their habit of regularly administering antipyretics was affected ⁽¹¹⁾. Küçükoğlu et al. (2013) determined that there was a significant difference between the age groups and educational background of mothers and their knowledge of storage conditions for antipyretics ⁽¹⁰⁾.

A study conducted by Celasin et al. (2008) found that the socio-economic level of families and the way of telling the child had a fever were significantly correlated with the educational background of mothers. As the educational level of mothers and income status of families increase, the rate of keeping a thermometer at home and taking the

child's temperature via the thermometer increases ⁽⁶⁾. A study conducted by Alqudahet al. (2019) found that the socio-economic level of families affected their knowledge of fever and fever management applications and parents with lower socio-economic level were more experienced ⁽⁹⁾.

A study conducted by Yiğit et al. (2003) evaluated the age of mothers and their knowledge of the harms of fever. They found that the rate of giving exact information increased with age and there was a significant correlation between. This was related with the increase of experiences together with age ⁽¹⁷⁾. The studies conducted indicate that as parents' experiences of fever increase, accurate applications in fever management increase ^(13,17,19,20,25).

Limitations to the Study

The study only comprised the fathers who came to the aforementioned hospital between January and September 2019 when the study was conducted. Therefore, it is not possible to generalize the study all fathers.

CONCLUSION AND RECOMMENDATIONS

The present study determined that the fathers with different age groups, educational levels and income statuses knew that high fever was harmful for children, were worried that children might have a seizure, usually evaluated fever by touching the skin, usually used the armpit area for fever measuring, defined all temperatures at 37°C or above to be fever, chose a warm shower as initial intervention and administered antipyretics every four hours. Age was not effective on the knowledge, attitudes and applications of the fathers regarding high fever. However, educational level and income status affected their knowledge, attitudes, and applications regarding high fever management. It is possible to recommend that fathers be included in the trainings on knowledge, attitudes, and applications regarding fever management in primary, secondary and tertiary healthcare institutions. In this way, it may be possible to make a contribution to the prevention of wrong applications performed during a high fever.

Acknowledgments

Many thanks to the fathers who took part in the study.

Author contribution

Study conception and design: LZA; data collection: LZA; analysis and interpretation of results: LZA; draft manuscript preparation: LZA. The author reviewed the results and approved the final version of the manuscript.

Ethical approval

The study was approved by the Dicle University Medical Faculty Non-interventional Clinical Research Ethics Committee (Protocol no. 214/06.06.2018).

Funding

The author declare that the study received no funding.

Conflict of interest

The author declare that there is no conflict of interest.

Yazar katkısı

Araştırma fikri ve tasarımı: LZA; veri toplama: LZA; sonuçların analizi ve yorumlanması: LZA; araştırma metnini hazırlama: LZA. Yazar araştırma sonuçlarını gözden geçirdi ve araştırmanın son halini onayladı.

Etik kurul onayı

Bu araştırma için Dicle Üniversitesi Tıp Fakültesi Girişimsel Olmayan Klinik Araştırmalar Etik Kurulundan onay alınmıştır (Karar no: 214/06.06.2018).

Finansal destek

Yazar araştırma için finansal bir destek almadıklarını beyan etmiştir.

Çıkar çatışması

Yazar herhangi bir çıkar çatışması olmadığını beyan etmiştir.

REFERENCES

1. Baraff LJ. Management of fever without source in infants and children. *Annals of Emergency Medicine* 2000; 36(6): 602-614. [\[Crossref\]](#)
2. Fields E, Chard J, Murphy M S, Richardson M. Guideline Development G, Technical T. Assessment and initial management of feverish illness in children younger than 5 years: summary of updated NICE guidance. *BMJ* 2013; 346. [\[Crossref\]](#)
3. Kelly M, Sahm LJ, Shiely F, O'Sullivan R, McGillicuddy A, McCarthy S. Parentalknowledge, attitudes and beliefs regardingfever in children: an interviewstudy. *BMC Public Health* 2016; 16(1): 1-7. [\[Crossref\]](#)

4. McDougall P, Harrison M. Fever and feverish illness in children under five years. *Nursing Standard* 2014; 28(30). [\[Crossref\]](#)
5. Haliciođlu O, Koç F, Akman SA, Teyin A. In feverish children, mothers' knowledge and home management about fever and its relationship with sociodemographical characteristics. *İzmir Dr. Behçet Uz Çocuk Hastanesi Dergisi* 2011;1(1): 13-19. [\[Crossref\]](#)
6. CelasinNŞ, Ergin D, Atman Ü. Yüksek ateş şikayeti ile hastaneye yatırılan 0-6 yaş grubu çocukları olan annelerin yüksek ateşe ilişkin bilgi ve tutumları. *Fırat Üniversitesi Sağlık Bilimleri Dergisi* 2008; 22(6): 315-322.
7. Gupta MS, Rajput U. Parental knowledge, attitude and practices regarding fever in their children: a hospital-based prospective study. *Australasian Medical J* 2012; 5(1): 106.
8. Cinar ND, Altun I, Altınkaynak S, Walsh A. Turkish parents' management of childhood fever: a cross-sectional survey using the PFMS-TR. *Australasian Emergency Nursing Journal*: 2014; 17(1): 3-10. [\[Crossref\]](#)
9. Alqudah M, Cowin L, George A, Johnson M. Child fever management: A comparative study of Australian parents with limited and functional health literacy. *Nursing & Health Sciences* 2019; 21(2): 157-163. [\[Crossref\]](#)
10. Küçüköđlu S, Polat S, Güdek E. Annelerin evde ilaçları saklama koşullarıyla ilgili bilgi ve uygulamalarının belirlenmesi. *Anadolu Hemşirelik ve Sağlık Bilimleri Dergisi* 2013; 16(4): 212-218.
11. Catakli T, Can V, Dallar Y. Is mothers' knowledge of antipyretics enough. *J Pediatr Infect* 2012; 6(4): 139-143. [\[Crossref\]](#)
12. Walsh A, Edwards H, Fraser J. Parents' childhood fever management: community survey and instrument development. *Journal of Advanced Nursing* 2008; 63(4): 376-388. [\[Crossref\]](#)
13. Goldman RD, Scolnik D. Underdosing of acetaminophen by parents and emergency department utilization. *Pediatric Emergency Care* 2004; 20(2), 89-93. [\[Crossref\]](#)
14. Kelly M, Sahm L, McCarthy S, O'Sullivan R, McGillicuddy A, Shiely F. Randomised controlled trial of an intervention to improve parental knowledge and management practices of fever. *BMC Pediatrics* 2019; 19(1): 1-10. [\[Crossref\]](#)
15. Najimi A, Dolatabadi NK, Esmaeili AA, Sharifirad GR. The effect of educational program on knowledge, attitude and practice of mothers regarding prevention of febrile seizure in children. *Journal of Education and Health Promotion* 2013; 2. [\[Crossref\]](#)
16. Karwowska A, Nijssen-Jordan C, Johnson D, Davies HD. Parental and health care provider understanding of childhood fever: a Canadian perspective. *Canadian Journal of Emergency Medicine* 2002; 4(6): 394-400. [\[Crossref\]](#)
17. Yiđit R, Esenay F, Şen E, Serinol Z. Mothers' information and applications about high fever [Turkish article]. *Atatürk Üniversitesi Hemşirelik Yüksekokulu Dergisi* 2003; 6(3).
18. O'Neill-Murphy K, Liebman M, Barnsteiner JH. Fever education: does it reduce parent fever anxiety? *Pediatric Emergency Care* 2001; 17(1): 47. [\[Crossref\]](#)
19. Sahm LJ, Kelly M, McCarthy S, O'Sullivan R, Shiely F, Rømsing J. Knowledge, attitudes and beliefs of parents regarding fever in children: a Danish interview study. *Acta Paediatrica* 2016; 105(1): 69-73. [\[Crossref\]](#)
20. Enarson MC, Ali S, Vandermeer B, Wright RB, Klassen TP, Spiers JA. Beliefs and expectations of Canadian parents who bring febrile children for medical care. *Pediatrics* 2012; 130(4): e905-e912. [\[Crossref\]](#)
21. Yiđitalp G. 0-6 yaş çocuđu olan annelerin ateş konusunda bilgi ve uygulamaları: Diyarbakır örneđi. *STED/Sürekli Tıp Eđitimi Dergisi* 28(3), 172-180. 2019; 28(3):172-180. [\[Crossref\]](#)
22. Araz NÇ. Ailelerin ateşli çocuđu yaklaşımı: bilgi, tutum ve uygulamaları. *Türkiye Çocuk Hastalıkları Dergisi* 2013; 7(1): 27-32.
23. Türker Y, Baltacı D, Yıldırım FB, Arslan B, Kara İH. Yüksek ateş bulgusu olan 0-6 yaş grubu çocukların annelerinin yüksek ateşe ilişkin bilgi ve tutumları. *Duzce Medical Journal* 2015; 17(1).
24. Patricia, C. Evidence-based management of childhood fever: what pediatric nurses need to know. *Journal of Pediatric Nursing* 2014; 29(4): 372-375. [\[Crossref\]](#)
25. Teagle AR, Powell CV. Is fever phobia driving inappropriate use of antipyretics? *Archives Of Disease in Childhood* 2014; 99(7): 701-702. [\[Crossref\]](#)
26. Bebis H, Coskun S, Acilel C, Ozdemir S. Determination of the knowledge and practice on fever of mother with 0-6 year's children. *TAF Prev Med Bull* 2013; 12(6). [\[Crossref\]](#)
27. Temel AB, Arabacı Z, Kahveci T. Annelerin çocuklarında ateş yönetimi ile ilgili bilgi, tutum ve uygulamalarının deđerlendirilmesi. *Sađlık Akademisi Kastamonu* 2016; 1(1): 1-17. [\[Crossref\]](#)
28. Kilicaslan O, Sonmez CI, Dincer D, Sengun Y, Temizkan RC, Eroz R. ve ark. Annelerin ateşli çocuklarda tutum ve davranışları; Düzce Üniversitesi Tıp Fakóltesi örneđi. *Family Practice And Palliative Care* 2018; 3(1):12-17.