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First Aid Self-efficacy in Mothers of Children Aged 0-4 Years: The Gümüşhane Example

0-4 Yaş Arası Çocuğu Olan Annelerin Ev Kazalarına Yönelik Öz-yeterlilikleri: Gümüşhane Örneği

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Abstract

Introduction: The high relationship between the effective application of first aid after home accidents and survival determines the priorities in first aid. Childcare is mostly the responsibility of mothers, and their knowledge and practices regarding the management of home injuries are crucial in reducing morbidity and mortality associated with home accidents. This study aimed to examine the first aid self-efficacy of mothers with children aged 0-4 years to manage their children's home accidents.

Methods: This cross-sectional study, focusing on the first aid self-efficacy of mothers with children aged 0-4 for home accidents, was conducted with 266 mothers at a district government hospital affiliated with the Ministry of Health in the Eastern Black Sea Region between January 1, 2023, and August 1, 2023. Data were collected through a "demographic information form" and the "first aid self-efficacy scale for home accidents".

Results: The mean score of the first aid self-efficacy scale in home accidents was found to be 2.15±0.95 and significant differences were found according to the mother's level of education, number of children, income status, caregiver of the child and mothers' first aid status.

Conclusion: In conclusion, the findings of the study showed that first aid self-efficacy is not based solely on demographic factors, but instead may be shaped more by education, experience and the general approach of parents as parents, although mothers' knowledge of first aid was below average.

Keywords: Mother, child, home accidents, self-efficacy

Öz

Giriş: Ev içi kazalardan sonra ilk yardım uygulamalarının etkili bir şekilde harekete geçirilmesi ile yaşamda kalma arasındaki ilişkinin yüksek olması, ilk yardımdaki öncelikleri belirlemektedir. Çocuğun bakımı çoğunlukla annelerin sorumluluğundadır ve evdeki yaralanmaların yönetimi konusundaki bilgi ve uygulamaları ev kazalarıyla ilişkili morbidite ve mortaliteyi azaltmada önemlidir. Bu çalışma 0-4 yaş arası çocuğu olan annelerin çocuklarının ev kazalarını yönetmeye yönelik ilk yardım öz-yeterliliklerini incelemeyi amaçladı.

Yöntemler: 1 Ocak 2023-1 Ağustos 2023 tarihleri arasında Doğu Karadeniz Bölgesi'nde Sağlık Bakanlığı'na bağlı bir ilçe devlet hastanesinde 0-4 yaş arası çocuğu olan annelerin ev kazalarına yönelik ilk yardım öz-yeterliliklerine odaklanan bu kesitsel çalışma 266 anne ile yürütüldü. Veriler "bilgi formu" ve "ev kazalarında ilk yardım öz-yeterlik ölçeği" ile toplandı.

Bulgular: Annelerin ev kazalarında ilk yardım öz-yeterlik ölçeği puan ortalaması 2,15±0,95 saptanmış olup annenin eğitim düzeyi, çocuk sayısı, gelir durumu, çocuğa bakım veren kişi ve annelerin ilk yardım alma durumlarına göre anlamlı farklılıklar saptandı.

Sonuç: Sonuç olarak, araştırmanın bulguları, ilk yardım öz-yeterliliğinin sadece demografik faktörlere dayanmadığını, bunun yerine daha çok eğitim, deneyim ve anne-baba olarak ebeveynlerin genel yaklaşımına bağlı olarak şekillenebileceğini bununla birlikte annelerin ilk yardım konusundaki bilgilerinin ortalamanın altında olduğunu gösterdi.

Anahtar Kelimeler: Anne, çocuk, ev kazaları, öz-yeterlilik

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Introduction

Accidents in childhood are among the leading causes of death in young children; additionally, accidents that can lead to disability can have lifelong negative effects on children and their families.[1,2] The risk of home accidents in children under five is high, particularly due to their inherent curiosity, excessive activity, inability to assess pain, and low levels of awareness.[3] The most common home accidents include falls, burns, cuts, suffocation (due to aspiration), poisoning, and electrical shocks.[4]

Current statistics indicate that home accidents are the leading cause of death in children under five and the second leading cause of death in children aged 5 to 14 years.[5] Furthermore, injuries in children under the age of six mostly occur in the home environment, making this age group a high-risk category.[6] According to 2017 data from the World Health Organization, each year, 200,000 children under five die from unintentional injuries related to the environment, such as falls, poisoning, and suffocation.[7] According to the statistics on deaths and causes of death, poisoning accidents at home were reported as a significant cause of death among children aged 1-4 years in 2022 in Türkiye.[8] Childhood accidents are caused by genetic, behavioral, and environmental factors, as well as parental characteristics.[9] The primary caregivers for children aged 0-4 years are generally their mothers. The mother's education level is known to have a positive impact on her knowledge and practices regarding child health.[10] However, studies have shown that the knowledge of mothers is generally low and that there is a lack of local studies addressing this problem.[11-14] Studies informing injury prevention and evaluating the outcome of educational interventions have highlighted that parents have inadequate knowledge of paediatric first aid principles.[15-17] Childhood home accidents are a health problem that places a significant burden on families and has a major impact on a child's health, leading to long-term mental and functional impairment. Considering this information, the current study examines the self-efficacy of mothers with children aged 0-4 years in managing home accidents.

Material and Methods

Type of the Study

The study has a descriptive and cross-sectional design.

Time and Place of the Research

The study was conducted between January 1, 2023, and August 1, 2023, at a district government hospital affiliated with the Ministry of Health in the Eastern Black Sea Region of Türkiye.

Study Sample

The study sample consisted of 266 parents whose children were hospitalized in the pediatric health and disease department of a state hospital. The inclusion criteria for the parents were as follows: (1) being a parent with a child aged 0-4 years, (2) being literate, and (3) being willing to participate in the study. Exclusion criteria are: (1) a neurological disorder in the mother and child; (2) the mother does not speak Turkish. The random sampling method was used in the study. The population of the study consisted of mothers of children aged 0-4 years who were hospitalised between 1 January 2023 and 1 August 2023 to receive health care services. The sample consisted of 266 mothers who met the inclusion criteria of the study.

Study Questions

1. What are the types of accidents frequently encountered by mothers with children aged 0-4 years in home accidents?

2. How do mothers' descriptive characteristics influence their first aid self-efficacy levels?

Data Collection Tools

Demographic information form for mothers and children: This form was developed by the authors of the current study. It included 11 questions regarding the mother's age, education level, number of children, the gender and age of the child 0-4 years, chronic health conditions of the child, history of previous home accidents, the person responsible for childcare, family income status, whether the parents have social security, as well as whether the mother has previously received any first aid training.

First aid self-efficacy scale for home accidents: This scale was developed by Wei et al.[2] for evaluating interventions that mothers can apply in home accidents. The Turkish version of the scale was validated for reliability by Altundağ et al.[18]. The scale consists of 12 items with a 5-point Likert type design, ranging from "strongly agree" to "strongly disagree", that are scored from 1 to 5. The original study reported a Cronbach's alpha value of 0.86, and the current study found a value of 0.89. Scores from 1 to 5 indicate higher levels of perception. Higher scores indicated better self-efficacy in first aid.

Data Collection Process

The data were collected by the researcher through face-to-face interviews with the mothers who were accompanying their hospitalized children. The mothers were first informed about the study and its aims, and their consent was obtained. The mother was then asked the research questions in the patient room where only the mother and child were present. The patient rooms in the pediatric ward are single; only the mother is present as a companion. The data collection process took approximately 15 minutes.

Statistical Analysis

The data were analyzed using SPSS-25 (Statistical Package for Social Sciences) software. Initially, the normality of the data was tested using skewness and kurtosis values. The distribution is considered to be normal if the skewness and kurtosis coefficients fall between -1.5 and +1.5.[19] The data collected in the current study showed a normal distribution. Accordingly, the "Independent samples t-test" was used for comparing two independent groups, and "one-way ANOVA" was used for comparing three or more independent groups. A significance level of $p<0.05$ was used to determine statistical differences. In cases of significant differences in group comparisons, Cohen's d was used to assess the effect size for pairwise comparisons. A Cohen's d of 0.2 or below represents a small effect, 0.5-0.8 represents a medium effect, and 0.8 or above represents a large effect. For comparisons involving three or more groups, eta-squared (η^2) was used. An eta-squared value of 0.01 indicates a small effect, 0.06 indicates a medium effect, and values above 0.14 indicate a large effect.[19] The current study also included percentage, frequency, mean, and standard deviation analyses.

Ethical Dimension of the Study

Ethical approval was obtained from Gümüşhane University Scientific Research and Publication Ethics Committee before the study started (decision no: E-95674917-108.99-137523, date: 26.10.2022). The participants were informed about the research, and their consent was obtained before they were included in the study. The research was conducted in accordance with the ethical principles outlined in the Helsinki Declaration.

Results

In the current study, 52.6% of the mothers were aged between 20 to 30 years, and 47.4% were between 31 to 47 years of age. Fifty-nine point four percent have a high school education or less. In terms of the number of children in the family, 42.5% had one child, 36.8% had two children, and 20.7% had three children. The gender distribution of the children under four years old indicated that 53.4% were male, with a mean age of 1.26±0.44 years. Among them, 73.3% were from 0 to 1 year of age, and 26.7% were from 2 to 3 years of age. 53.4% of the surveyed children are the first child of their families. 4.1% of the children had a chronic illness, while 38.7% had a prior experience of a home accident. Evaluation of the frequency of accidents indicated that 68.9% of the children had had at least one home accident. The top three among the various types of accidents that the children experienced were falls at 77.1%, burns at 8.3%, and aspiration at 6.3%.

Based on the data provided by the participants, 60.5% had incomes lower than their expenses, and 85% had access to social security. Additionally, 75.9% of the mothers took care of their children under the age of four by themselves, while 12% stated that their children were cared for by grandmothers and 12% by nannies. Additionally, 69.2% of the mothers reported that they had not received any education on home accidents (Table 1).

The mean score of the participants on the first aid self-efficacy scale for home accidents was found to be 2.15±0.95 (Table 2). The mean and standard deviation values for each item are presented in Table 2. Only four items had above-average scores, which were as follows: "I know how to call 112 in case of an accident"; "I can stop the bleeding when a child's nose is bleeding"; "If a child has a burn from a hot liquid, I can intervene with water, remove the clothes, submerge the area in water, cover the wound, and send the child to a hospital"; and "I can intervene in a child's injury when there is a wound". The items where mothers felt the least competent were, "I can perform cardiopulmonary resuscitation (CPR) if a child's heart stops", "I can intervene in the injured area when a child has a bone fracture", and "I can carry out artificial respiration if a child is not breathing".

A comparison of the results of the descriptive information of the mothers and their children, as well as the mean scores on the first aid self-efficacy scale for home accidents, is presented in Table 3. No statistically significant differences were found among the mother's age, child's gender, child's age, child's chronic illness status, child's previous home accident history, the family's social security status, as well as the mean scores on the first aid self-efficacy scale for home accidents ($p>0.05$).

The parameters that showed a significant difference with regard to the mean scores on the first aid self-efficacy scale for home accidents were the level of education of the mother ($F=7.054$; $p<0.001$; Cohen's $d=0.88$), the number of children that the mothers had ($F=7.398$; $p=0.001$; $^2=0.05$), the family's income status ($F=4.479$; $p=0.012$; $^2=0.03$), the person responsible for childcare ($F=22.709$; $p<0.001$; $^2=0.14$), and whether the mother had received any first aid training previously ($t=12.939$; $p<0.001$; Cohen's $d=1.76$) (Table 3). A Bonferroni analysis of our data indicated that higher levels of education, higher income levels, childcare provided exclusively by the mother, mothers who had previously received first aid training, as opposed to their counterparts, were all associated with higher mean scores on the first aid self-efficacy scale for home accidents (Table 3). Additionally, the decrease in the mean self-efficacy score was identified as the number of children increased. A Bonferroni analysis indicated that mothers with three children had lower mean scores compared to mothers with two children or one child; moreover, mothers with two children had lower mean scores compared to mothers with one child.

Table 1. Distribution of the descriptive data of the mother and her children

Mother's age (years)	n	%
20-30	140	52.6
31-47	126	47.4
Mean	30.70±5.06	
Mother's education level		
High school and below (high school, middle school, primary school)	158	59.4
Above high school (associate degree, bachelor's degree, graduate degree)	108	40.6
Number of children		
One	113	42.5
Two	98	36.8
Three or more	55	20.7
Child's gender		
Female	124	46.6
Male	142	53.4
Child's age		
Under 1 year	195	73.3
Over 1 year	71	26.7
Child's average age	1.26±0.44	
Order of birth of the child		
First	142	53.4
Second	80	30.1
Third and more	44	16.5
Presence of a chronic illness in the child		
Present	13	4.9
Absent	253	95.1
History of the child having a home accident		
Yes	103	38.7
No	163	61.3
The frequency of accidents among children who have had an accident (n=103)		
Once	71	68.9
Twice	21	20.4
Three or more	11	10.7
Types of accidents that the children have experienced (multiple answers allowed) (n=96)		
Falls	74	77.1
Burn	8	8.3
Aspiration	6	6.3
Poisoning	5	5.2
Drowning	3	3.1
Family income status		
Income is higher than expenses	60	22.6
Income is equal to expenses	45	16.9
Income is lower than expenses	161	60.5
Social security status		
Present	226	85.0
Absent	40	15.0
Person who takes care of the child		
Mother	202	75.9
Grandmother	32	12.0
Nanny	32	12.0

Table 1. Continued

Mother's age (years)	n	%
Mother's first aid training status		
Yes	82	30.8
No	184	69.2
Total	**266**	**100**

Table 2. Distribution of the mean and standard deviation values related to the items of the mothers' first aid self-efficacy scale for home accidents

Items	Mean	SD
1. I know how to call 112 in case of an accident.	3.60	0.95
2. I can perform actions such as rinsing with water, removing clothes, immersing in water, covering the wound, and sending the child to the hospital in case of a burn accident with a hot liquid.	3.04	1.20
3. I can perform first aid if a child is choking (Heimlich maneuver).	1.90	1.65
4. I can perform artificial respiration if a child is not breathing.	1.43	1.60
5. I can perform chest compressions if a child's heart stops.	1.30	1.63
6. I can assist with the injured area in case of a bone fracture in a child.	1.34	1.48
7. I can treat wounds in case of an injury to a child.	2.79	1.18
8. I can stop the bleeding if a child has a nosebleed.	3.31	1.15
9. I can assist with the affected area in case of muscle cramps/spasms in a child.	1.77	1.42
10. I can administer first aid if a young child is choking.	1.54	1.48
11. I can apply the correct methods if a child accidentally swallows something.	1.76	1.56
12. I can assess the severity of a child's injury in case of an accident.	1.98	1.33
Total scale	2.15	0.95

*Mean: Average, SD: Standard deviation

Discussion

In the current study, the self-efficacy of mothers with children aged 0-4 years in managing home accidents using first aid was examined. We observed that 38.7% of the children of the participating mothers had previously experienced a home accident. Among the accidents that the children had experienced, the most common were falls, followed by burns, aspiration, poisoning, and suffocation. Falls are very commonly seen in this age group and rank among the most frequent accidents.[20-23] Other studies conducted in Türkiye also reported falls, burns, cuts, poisoning, suffocation, and foreign body aspiration as the most common home accidents.[24-26] The results of the current study are therefore consistent with the literature. Our findings clearly show that home accidents during childhood, especially among children aged 0-4 years, are a significant health issue. The fact that

Table 3. Comparison of the average scores of the mothers' first aid self-efficacy scale in home accidents and their descriptive characteristics

Variables	Scale Mean ± SD
Mother's age	
20-30 (n=140)	2.10±0.91
31-47 (n=126)	2.20±1.01
t;p	0.832;0.406
Mother's education level	
High school and below (n=158)	1.84±0.89
Above high school (n=108)	2.61+0.85
t;p	7.054;p<0.001
Cohen's d	0.88
Number of children	
a One (n=113)	2.34±0.95
b Two (n=98)	2.16±0.97
c Three or more (n=55)	1.75±0.82
F;p	7.398;0.001
η^2	0.05
Bonferroni result	a>b>c
Child's gender	
Girl (n=124)	2.09±0.97
Male (n=142)	2.20±0.94
t;p	0.985;0.326
Cohen's d	-
Child's age	
0-1 (n=195)	2.16±0.95
2-3 (n=71)	2.13±0.98
t;p	0.257;0.797
Cohen's d	-
Presence of chronic illness in the child	
Present (n=13)	2.30±1.07
Absent (n=253)	2.14±0.95
t;p	0.562;0.575
History of the child having a home accident	
Yes (n=103)	2.05±0.99
No (n=163)	2.21±0.93
t;p	1.359;0.175
Frequency of accidents among children who have had an accident (n=103)	
Once (n=71)	2.18±0.84
Twice (n=21)	1.16±0.31
Three or more (n=11)	1.75±0.24
F;p	3.451;0.239
Family income status	
[a]Income is higher than expenses (n=60)	2.29;0.87
[b]Income is equal to expenses (n=45)	1.99±1.10
[c]Income is lower than expenses (n=161)	1.88±0.95
F;p	4.479;0.012
η^2	0.03
Bonferroni result	a>b, a>c
Social security status	
Present (n=226)	2.18±0.95
Absent (n=40)	1.96±0.99
t;p	1.367;0.173
Person who takes care of the child	
a Mother	1.95±0.91
b Grandmother	2.89±0.77
c Nanny	2.71±0.81
F;p	22.709;<0.001
η2	0.14
Bonferroni result	a>b, a>c
Mother's first aid training status	
Yes (n=82)	3.04±0.69
No (n=184)	1.75±0.77
t;p	12.939;<0.001
Cohen's d	1.76
Total	

*Mean: Average, SD: Standard deviation, t: Test value, p: Significance value, η^2: Eta square,
F: Ratio of variances, a-b-c: Characterisation of diversity and sequence information

falls are the most common type of accident in this age group indicates the physical vulnerability of young children, as they are still in the developmental stages of their motor skills and are more sensitive to environmental risk factors. Other common types of accidents, such as burns, aspiration, poisoning, and suffocation, can largely be prevented with measures that can be taken in the home environment. This highlights a critical role of mothers' level of knowledge and self-efficacy in preventing home accidents.

The scores on the home accident first aid self-efficacy scale were found to be below average, with only four items scoring above the average. These items were as follows: "I know how to call 112 in the case of an accident"; "I can stop the bleeding when a child's nose is bleeding"; "If a child has a liquid burn, I can intervene by rinsing with water, removing their clothes, immersing the area in water, covering the wound, and sending them to the hospital"; and "I can intervene in wounds when a child is injured". In contrast, the items where mothers felt the least competent were: "If a child's heart stops, I can perform CPR", "If a child has a broken bone, I can intervene at the injured area", and "If a child is not breathing, I can perform artificial respiration". Our data corroborate similar studies that have reported that most parents are aware of an emergency number and how to call it

in case of an accident, but lack CPR and other critical first aid skills.[2,27] Wei et al.[2] reported that the mothers' CPR skills were the lowest compared to all other skills. Similarly, Asmar et al.[28] reported that mothers of children under five years of age had very low self-efficacy scores for carrying out CPR if the child was suffocating. Another study conducted with 2,125 parents of 3-12-month-old babies also reported insufficient self-confidence in providing CPR during suffocation.[29] The findings of the current study, as well as published studies, show that the self-efficacy of the mothers in intervening in home accidents is at a basic level, with significant gaps in critical skills such as CPR, artificial respiration, and bone fracture intervention. This suggests the need to expand the scope of first aid training, with a particular focus on practical training in critical skills, especially CPR such training programs could increase the self-confidence of mothers and help them manage the outcomes of home accidents more effectively.

The current study identified that the education level of the mother was an important factor in influencing first aid self-efficacy. Thus, mothers with education levels higher than high school had significantly higher self-efficacy scores compared to mothers with lower educational levels, indicating that as education levels increase, so do the individuals' knowledge and skills. Nonetheless, both groups of participants scored below average, suggesting that despite a higher level of education, there was a deficiency in knowledge and skills regarding first aid. This further underscores the need for widespread education on home accidents and first aid. Other studies have also reported that the education level of mothers has a significant impact on their skills in preventing home accidents and providing first aid. For example, Inbaraj et al.[30] noted that the education level of mothers significantly influenced their perception of risks and dangers related to home accidents. Thein et al.[31] identified the education level of mothers as playing a determining role in preventing injuries from home accidents and developing first aid skills. Moreover, Wei et al.[2] reported that an increase in the level of education of the mother was associated with an improvement in their first aid self-efficacy. These findings suggest that mothers with higher levels of education may have superior abilities to cope with emergencies and may therefore benefit more from first aid training programs for parents. The current study found that mothers with three children had lower first aid self-efficacy scores compared to those with two or one child. Mothers with two children also had lower self-efficacy scores than those with one child.[6] A study conducted during the recent COVID-19 pandemic indicated that mothers with fewer children had higher self-efficacy levels in performing first aid and preventing home accidents. These mothers were able to spend more time with each child individually and thus manage the risks more effectively.[32] Another study noted that as the number of children increased, the mothers felt less self-efficacious in first aid because their attention was more divided.[33] This love self-efficacy scores suggest that many mothers may lack the confidence or skills to provide effective first aid in emergency situations, potentially leading to delays in life-saving interventions.

The current study also found that individuals with an income level higher than their expenditures had higher self-efficacy scores compared to those whose income was equal to or less than their expenditures. This suggests that economic power is likely to influence parenting skills and self-efficacy. Income may have a direct effect on the ability of the parents to more effectively manage their behaviors and decisions related to child care. For instance, families with higher income levels may spend more quality time with their children and have easier access to educational and developmental opportunities, which can improve parenting skills. However, one study reported the lack of a significant relationship between family income and parental self-efficacy.[2] While other studies have suggested that socio-economic disadvantages may limit parental self-efficacy.[34] These conflicting findings indicate that the impact of socio-economic status on parenting is complex and multifaceted. Higher income is likely to provide more opportunities and resources while lower income levels can increase the stress levels of the parents, which may negatively affect their self-efficacy. Therefore, the relationship between income and self-efficacy may be shaped not only by economic factors but also by environmental and psychological factors. We found in the current study that the first aid self-efficacy of the participants varied significantly depending on who was taking care of the child. Specifically, mothers who cared for their own children had higher self-efficacy scores than childcare combinations such as mother-grandmother or mother-nanny. This suggests that the level of parental involvement in child care can affect how competent the parents feel about first aid. Supporting our findings, studies have shown that mothers who take an active role in child care develop better coping skills for emergencies and increase their self-efficacy. One study highlighted that mothers who provided direct care for their children managed the child's safety and their own first aid knowledge more effectively.[35] Other studies also suggest that the role of caregivers or extended family members in child care can influence the parents' preparedness for emergencies.[36] Therefore, it can be assumed that mothers who take care of their children themselves may have enhanced skills for quick and effective intervention in emergencies. Additionally, because they feel more responsible, they may be inclined to acquire more knowledge on the subject. Parental involvement thus directly influences self-efficacy, which can increase safety in child care. We observed a direct correlation between the first aid knowledge of the mother and self-efficacy, which is consistent with previous research. Hess et al.[37], Suzuki et al.[38], and Sevigny

and Loutzenhiser[39] also reported that mothers who received first aid training had higher self-efficacy scores than those who did not. This finding indicates that trained individuals are more prepared and confident in handling emergencies, which allows them to intervene more effectively in home accidents. The literature provides strong evidence that first aid training helps individuals feel more equipped to handle emergencies. This training goes beyond acquiring knowledge, as it enables individuals to feel more competent in applying this knowledge, thus playing a key role in creating a safe environment.

We observed no statistically significant relationship between the first aid self-efficacy scores and the mothers' age, child's gender, child's chronic illness status, previous accident history frequency of accidents in the children as well as the family's social security status, which suggests these factors do not influence mothers' first aid self-efficacy. However, previous studies have reported conflicting findings regarding the impact of such factors. Some studies suggest that demographic factors such as the mother's age and child's health status can influence the first aid knowledge and application skills of the parents. For example, it has been noted that as the parents age, their experience increases, but physical and psychological barriers may also emerge.[40] Some studies have reported no significant impact of factors such as social security and the history of a child's previous accidents on the first aid self-efficacy of the parents.[41] Factors such as a child's gender or the presence of chronic illnesses could also influence the mothers' attitude towards first aid. However, the impact of such demographic variables is quite complex, and each individual may respond differently to these factors.[42] The findings of the current study also indicate that first aid self-efficacy is not solely based on demographic factors, but rather is more likely shaped by education, experience, and the general approach of individuals towards parenting.

Study Limitations

The study used a cross-sectional design, with data collected at a single point in time from one center. This may limit the generalizability of the findings to all mothers of young children. Therefore, the results may not be applicable to mothers from different regions, cultural backgrounds, or socioeconomic statuses. Longitudinal studies are needed to examine the changes in the factors influencing first aid self-efficacy and the observed outcomes over time, and to provide a better understanding of the cause-and-effect relationships.

Conclusion

As a result, it was found that education level, number of children, income status of the family, child caregiver, and mothers' first aid training status played an important role among the factors affecting first aid self-efficacy of mothers with insufficient first aid knowledge in the study. These findings suggest that more training and support for parents in first aid would increase their self-efficacy and lead to more effective results in terms of child safety. Although the training should include individual mothers, it should be provided not only theoretically but also practically. In this way, practical first aid training can be encouraged. Accordingly, it is recommended that training programmes be used as a powerful tool to increase parents' level of preparedness for emergencies.

Ethics

Ethics Committee Approval: Ethical approval was obtained from Gümüşhane University Scientific Research and Publication Ethics Committee before the study started (decision no: E-95674917-108.99-137523, date: 26.10.2022).

Informed Consent: The participants were informed about the research, and their consent was obtained before they were included in the study.

Footnotes

Authorship Contributions

Surgical and Medical Practices: B.G., İ.K., B.Ç., Concept: B.G., İ.K., B.Ç., Design: B.G., İ.K., B.Ç., Data Collection or Processing: B.G., B.Ç., Analysis or Interpretation: B.G., İ.K., B.Ç., Literature Search: B.G., B.Ç., Writing: B.G., B.Ç.

Conflict of Interest: No conflict of interest was declared by the authors.

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