



Safety Issue at Home: What is Mothers' Concern, What They Do, and What They Need?

Evde Güvenlik Sorunu: Annelerin Güvenlik Hakkındaki Kaygıları, Uygulamaları ve İhtiyaçları

Durmuş ASLAN¹
Meltem EMEN PARLATAN²

doi: 10.38089/iperj.2021.75

Geliş Tarihi: 05.10.2021

Kabul Tarihi: 05.11.2021

Yayınlanma Tarihi: 30.11.2021

Abstract: Infants and toddlers are the most vulnerable group of children. Families have different levels of concern about injury prevention. Therefore, the precautions they take may differ from one family to another. In Turkey, there is a lack of injury prevention programs for children. This situation exposes children to dangers. This study describes what types of injuries mothers are concerned about their children, what they do about injury prevention, and which information they need to keep their children safe. The research is designed as a survey. The participants consisted of 302 mothers with 0-36 months old children. Results showed that while most mothers saw their children's potential of injury as moderate or high, they felt competent to protect them. On the other hand, a significant number of mothers still had problems such as leaving their children alone in the kitchen and not taking precautions access to hot objects. Mothers needed the safety information most were first aid and safety rules.

Key Words: Child safety, injury, parent perceptions, prevention, safety at home

Öz: Bebekler ve küçük çocuklar en savunmasız çocuk gruplarıdır. Ailelerin çocuklarının yaralanmaların önlenmesi konusunda farklı düzeylerde endişeye sahiptirler. Bu nedenle aldıkları önlemler aileden aileye farklılık gösterebilmektedir. Türkiye'de çocuklara yönelik yaralanmaları önlemeye ilişkin formal bir program bulunmamaktadır. Bu durum çocukları tehlikelere açık hale getirmektedir. Bu çalışma, annelerin çocukları hakkında ne tür yaralanmalardan endişe duyduklarını, yaralanmaları önleme konusunda ne yaptıklarını ve çocuklarını güvende tutmak için hangi bilgilere ihtiyaç duyduklarını incelemektedir. Tarama olarak gerçekleştirilen bu araştırmaya 0-36 aylık çocuğu bulunan 302 anne katılmıştır. Elde edilen sonuçlar çoğu annenin, çocuklarının yaralanma potansiyelini orta veya yüksek olarak görse de, onları koruma konusunda kendilerini yeterli hissettiğini göstermiştir. Öte yandan, annelerin önemli bir kısmında çocuklarını mutfakta yalnız bırakma, sıcak nesnelere erişim konusunda önlem almama gibi sorunların devam etmekte olduğu saptanmıştır. Annelerin en çok ihtiyaç duyduğu güvenlik bilgileri ise ilk yardım ve güvenlik kuralları olarak belirlenmiştir.

Anahtar Kelimeler: Çocuk güvenliği, yaralanma, ebeveyn algıları, önleme, evde güvenlik

¹ Prof. Dr., University of Cukurova, Early Childhood Education Department, Turkey, durmaslan@gmail.com, <https://orcid.org/0000-0001-5204-7749>

² Res. Asist., University of Cukurova, Early Childhood Education Department, Turkey, meltem1514@hotmail.com, <https://orcid.org/0000-0002-9372-4790>

Introduction

Early childhood is a special period in human life where rapid progress and significant learning experiences take place in all fields of development. In this period, it is essential to provide the necessary conditions for children to grow up in a safe and healthy environment. For infants and toddlers, those primarily responsible for providing these conditions are the adults who care for them. In addition to the responsibility of adults to care for the child, a large part of this responsibility consists of "child health and safety".

Child safety, which means protecting the well-being of the child by anticipating dangerous situations for children and exhibiting appropriate safety behaviors (Nilsen et al., 2004), is a health, educational, psychological and legal issue. Child safety, which is a multidimensional concept, especially the physical injury part is a concern for parents all over the world. Due to the injuries that occur when the safety of children is not ensured, results ranging from minor injuries that children can receive treatment at home to hospitalization and even death are encountered.

In most industrialized countries around the world, injuries are the leading cause of hospitalization and death in children over the age of one (Morrongiello, Bell, Park & Pogrebtsova, 2016). In addition, these death rates are increasing in low and middle-income countries (Mock, Quansah, Krishnan, Arreola-Risa & Rivara, 2004). The exposure of young children to suffocation, poisoning, falls and burns are among the most common causes of their injury-related deaths, and it appears to account for almost half of young child deaths in many countries (World Health Organization, 2008). In Turkey, 45.4% of home accidents are seen in children between the ages of 0-6 (Turkish Statistical Institute, 2017). It is also known that inadequate supervision accounts for approximately 43% of deaths as a result of unintentional injury (Landen, Bauer & Kohn, 2003). In addition, according to the statistics included in the Death Certificate of the Turkish Ministry of Health, injuries and traumas (%25) are the leading cause of death for children aged between 1-4. Moreover, in prevalence of injury related deaths, unintentional injuries come first, transport accidents second, and falls in the third place (Ministry of Health, 2020). The current situation shows that the role of adults' responsibility for child safety is vital. On the other hand, even though we know that all these injuries are preventable, so why are these rates so high? Because there are some barriers in front of keeping children safe (Ablewhite et al., 2015). At this point, we have discussed three important issues identified in research that contribute to the degree of "child safety". The first one was parents' perceptions about injury prevention and safety, second one is safety practices and third getting access to correct information and efficient practices regarding safety.

In a study about parent perceptions, it was found that parents were most afraid of their children being hit by a car and had difficulties due to lack of awareness and knowledge during safety practices (Vincenten, Sector, Rogmans & Bouter, 2005). Also, various studies show that parents' perceptions about child safety may differ from each other, but these perceptions closely correlate with their safety practices (Ablewhite et al., 2015; Hogan et al., 2018; Santagati, Vezzosi & Angelillo, 2016; Siu et al., 2019). There is lack of studies in the literature addressing the needs and expectations of parents in preventing injuries, instead there are studies addressing the needs of parents who already have injured children (Aitken, Mele & Barrett, 2004).

In Turkey, there are some studies to determine parental perceptions about child safety, safety practices and predictors of injuries (Altuntaş et.al, 2013; Yurt & Keleş, 2019) but limited attempts are encountered regarding information needs about parents about safety and preventive interventions (Yıldırım & Kubilay, 2016). The Ministry of Health makes limited initiatives to ensure child and adolescent safety in cooperation with Public Health Centers (Ministry of Health, 2020). It is seen that there is no attempt at the any school level. To protect children from injury and keep them safe consistently, it is necessary to know the approach and practices of parents to the issue of injury and to determine their needs. Especially in countries such as Turkey, where the patriarchal social structure still preserves its power in many aspects, mothers are primarily responsible for the care and control of the children. At this point, awareness, and safety practices of mothers on this issue and determining their needs to keep their children safe are at a critical point for the safety of children. The

general purpose of this study is to reveal the perceptions, practices and information needs of mothers with infants and toddlers about child safety including injury prevention.

Methods

Study design

The research is designed as a survey. Surveys are an economical and useful method preferred to reach many participants in a short time (Saris & Gallhofer, 2014). This survey conducted with an online questionnaire about child safety.

Participants

Participants consisted of 302 mothers whose children are 0-36 months. Purposeful sampling was used in the study. Mothers of children from “three different age groups” and living different districts of Adana, Turkey were selected as participants. The reason why mothers were chosen as participants in the study is that they were seen primarily responsible for the care and education of their children in Turkey, and they were more accessible, and collaborative compared to fathers. Table 1 shows demographic characteristics of participants.

Table 1 Demographic characteristics of participants

Total Participants	N (%)
302 (100%)	
Mothers' Ages	
25-30	100 (33%)
31-35	104 (35%)
36-40	98 (32%)
Mothers' Education Levels	
Master's degree	33 (11%)
Bachelor's Degree	172 (57%)
High school	43 (14%)
Middle school	30 (10%)
Primary school	24 (8%)
Mothers' occupations	
Housewife	120 (40%)
Teacher	88 (29%)
Civil servant	34 (11%)
Worker	32 (11%)
Doctor	18 (6%)
Engineer	10 (3%)
Children's age	
0-1 year	96 (32%)
1-2 years	106 (35%)
2-3 years	100 (33%)
Children's sex	
Girl	132 (44%)
Boy	170 (56%)
Family income	
Min. Wage	118 (39%)
4000-8000 TL	119 (39%)
8001-12000 TL	65 (22%)

Ages of participants ranged from 25 to 40. Most of the mothers had undergraduate degrees. 40% of the mothers were housewives. It was followed by teachers, civil servants and workers. The number of mothers of children from three different age groups was close to each other.

Data collection tool

A questionnaire form developed by the researchers was used as a data collection tool. This form included questions about demographic characteristics of parents and children (8 items) and about perceptions, practices and needs of mothers regarding safety (14 items). In the development phase of the questionnaire, the candidate form was created by a systematic literature review. Later, the form had been reviewed by experts [eight academicians from medicine (4 male) and early childhood education department (4 female)] and Content Validity Index (CVI) was calculated with the Lawshe (1975) technique. For 8 experts Content Validity Ratio (CVR) was 0.78. Since the Content validity values are $CVI (1.00) > CVR (0.78)$, the content validity is statistically significant. In line with expert opinions, adjustments were made on the items by the researchers. After that, interviews were conducted with volunteer mothers to check the comprehensibility of the questions. A linguistic arrangement was made for items that were understood differently. The final version of the questionnaire was shared online in Google forms.

Data collection process

Firstly, we contacted with day care in the center of Adana to reach mothers with children aged 0-3. The aim of the research and the link of the questionnaire were shared with the mothers through the social networks of the day care centers (such as Facebook, WhatsApp). The mothers who volunteered were asked to fill out the questionnaire. The whole data was collected 2020-2021 academic year. The data collection process was taken six weeks.

Data analysis

The data obtained were transferred to the SPSS software V.19.0. In addition, Jamovi program was used in analyzing the data and creating the tables. Descriptive statistics were used to examine mothers' perceptions about safety, their practices to keep children safe and information need.

Ethical consideration

Different ethical precautions should be taken in studies with humans. Firstly, participants were informed in writing about aim of the study and process. Also, it was expressed to the participants that they could quit the study at any time they wanted. Secondly, they declared that they participated in the study voluntarily. The results of the study were shared with those who requested it.

Results

The findings of this study, which aims to determine mothers' perceptions, practices, and information needs about child safety, are presented under three separate headings.

Perceptions of mothers about keeping children safe

In this section, information such as how much injury risk participants consider their children are risky, which parts of the house they find riskier, what types of injuries they are worried about and what types of injuries they feel competent in preventing are shared in tables.

Table 2. Mothers' safety perceptions about their children, home place and injury types

Perceptions	Ages			Total (0-3 years)
	0-1 year	1-2 Years	2-3 years	
Potential of get injured to children according to mothers				
Insignificant	7	3	4	14 (5%)
Minor	16	15	20	51 (17%)
Moderate	45	52	42	139 (46%)
Major	16	21	22	59 (19%)
Extreme	12	15	12	39 (13%)

Table 2. Mothers' safety perceptions about their children, home place and injury types (Continued)

Perceptions	Ages			
	0-1 year	1-2 Years	2-3 years	Total (0-3 years)
Home places mothers' find most dangerous/risky				
Children's room	2	2	2	6 (2%)
Living room	19	5	3	27 (9%)
Kitchen	43	69	52	164 (54%)
Bathroom	5	4	8	17 (6%)
Toilet	1	0	3	4 (1%)
Parents' bedroom	2	0	1	3 (1%)
Balcony	24	22	25	71 (24%)
Garden	0	4	6	10 (3%)
Injury types of mothers' concern				
Fall	23	26	25	74 (24%)
Hit	7	11	9	27 (9%)
Suffocation	31	31	30	92 (30%)
Poisoning	7	7	10	24 (8%)
Electric shock	13	15	9	37 (12%)
Animal bite	5	5	9	19 (6%)
Burn	5	6	8	19 (6%)
Drowning	5	5	6	16 (5%)

Table 2 shows that the vast majority of mothers were perceived moderate and upper potential level of injury risk of their children. In addition, according to children's age groups, it is seen that the answers given were similar to each other. It was also understood that mothers see the kitchen as the most dangerous, the balcony as the second, and the living room as the third most dangerous place. The places perceived as the least dangerous were the toilet, the master bedroom, and the children's room. It was found that mothers were more concerned about certain types of injuries than others. Table 3 shows that how mothers perceive their competency about different injury types.

264

Table 3. Mothers' perceptions about their competence about preventing injuries

Injury Types	Competency				
	Very Good	Above Average	Average	Below Average	Weak
Fall					
0-1 age	22	46	22	3	3
1-2 ages	16	59	29	1	1
2-3 ages	19	46	32	2	1
Total	57 (19%)	151 (50%)	83 (27%)	6 (2%)	5 (2%)
Hit					
0-1 age	16	49	20	8	3
1-2 ages	12	56	35	2	1
2-3 ages	16	50	29	4	1
Total	44 (15%)	155 (51%)	84 (28%)	14 (5%)	5 (2%)
Suffocation					
0-1 age	30	36	14	12	4
1-2 ages	30	47	22	4	3
2-3 ages	23	46	21	7	3
Total	83 (27%)	129 (43%)	57 (19%)	23 (8%)	10 (3%)

Table 3. Mothers' perceptions about their competence about preventing injuries (Continued)

Injury Types	Competency				
	Very Good	Above Average	Average	Below Average	Weak
Poisoning					
0-1 age	33	30	16	11	6
1-2 ages	39	39	22	3	3
2-3 ages	23	49	19	8	1
Total	95 (31%)	118 (39%)	57 (19%)	22 (7%)	10 (3%)
Electric shock					
0-1 age	33	36	12	9	6
1-2 ages	39	42	20	1	4
2-3 ages	23	48	19	8	2
Total	95 (31%)	126 (42%)	51 (17%)	18 (6%)	12 (4%)
Burn					
0-1 age	31	38	13	9	5
1-2 ages	35	44	25	1	1
2-3 ages	24	56	14	6	0
Total	90 (30%)	138 (46%)	52 (17%)	16 (5%)	6 (2%)
Stranger Danger					
0-1 age	34	38	14	6	4
1-2 ages	33	47	22	2	2
2-3 ages	24	51	17	7	1
Total	91 (30%)	136 (45%)	53 (18%)	15 (5%)	7 (2%)

As seen in the table 3, between 39-51% of the mothers perceived their competence as “above average” in preventing various types of injuries. But the mothers who felt “very good” at injury prevention competency did not exceed 30% in all age groups. In addition, they gave close answers in the relevant categories in the age of groups and the concerns about the types of injuries were not differentiated according to the age groups. Although the answers given were close to each other, they felt most competent in preventing suffocation.

Mothers’ practices about safety

This section includes practices that mothers use in their daily lives to protect children from injuries. These are classified into two categories as safety materials and safety practices.



Figure 1. Safety materials that families have

According to Figure 1, all families had at least one safety material. On the other hand, mothers found different types of materials necessary. Most common material used was socket saver. Least common material used was ride safety equipment.

Table 4 Mothers' safety practices

Practices	Frequency				
	Always	Often	Sometimes	Rarely	Never
Talking to children about safety, injuries and remain safe					
0-1 age	41	30	17	2	6
1-2 ages	60	36	9	1	0
2-3 ages	55	38	7	0	0
Total	156 (52%)	104 (34%)	33 (11%)	3 (1%)	6 (2%)
Not leaving the child alone in the bathroom and the kitchen					
0-1 age	76	14	3	3	0
1-2 ages	63	29	11	2	1
2-3 ages	53	34	9	1	3
Total	192 (64%)	77 (25%)	23 (8%)	6 (2%)	4 (1%)
Keeping dangerous tools out of the reach of children					
0-1 age	85	8	3	0	0
1-2 ages	80	20	6	0	0
2-3 ages	78	19	3	0	0
Total ages	243 (80%)	47 (16%)	12 (4%)	0 (0%)	0 (0%)
Leaving alone in her/his room for a short time					
0-1 age	9	13	28	18	28
1-2 ages	3	15	41	28	19
2-3 ages	9	23	40	18	10
Total	21 (7%)	51 (17%)	109 (36%)	64 (21%)	57 (19%)
When buying items for the child, choosing the ones that comply with the safety standards.					
0-1 age	4	21	50	9	12
1-2 ages	5	32	48	18	3
2-3 ages	6	30	58	4	2
Total	15 (5%)	83 (27%)	156 (52%)	31 (10%)	16 (6%)
Sitting the child in the car seat / booster seat during the journey					
0-1 age	50	16	14	7	9
1-2 ages	51	20	11	9	15
2-3 ages	55	14	13	12	6
Total	156 (52%)	50 (16%)	38 (13%)	28 (9%)	30 (10%)

As seen in the Table 4, between 39-51% of the mothers perceived their competence as "above average" in preventing various types of injuries. But mothers who felt "very good" at injury prevention competency did not exceed 30% in all age groups. In addition, they gave close answers in the relevant categories in the age of groups and the concerns about the types of injuries were not differentiated according to the age groups. Although the answers given were close to each other, they felt most competent in preventing suffocation.

Needs of mothers to keep their children safe

Results shows that mothers agreed about that they needed help to keep children safe; on the other hand, they applied different information resources when they needed information about injuries or child safety. The sources that mothers used to access safety information are shown Figure 2.

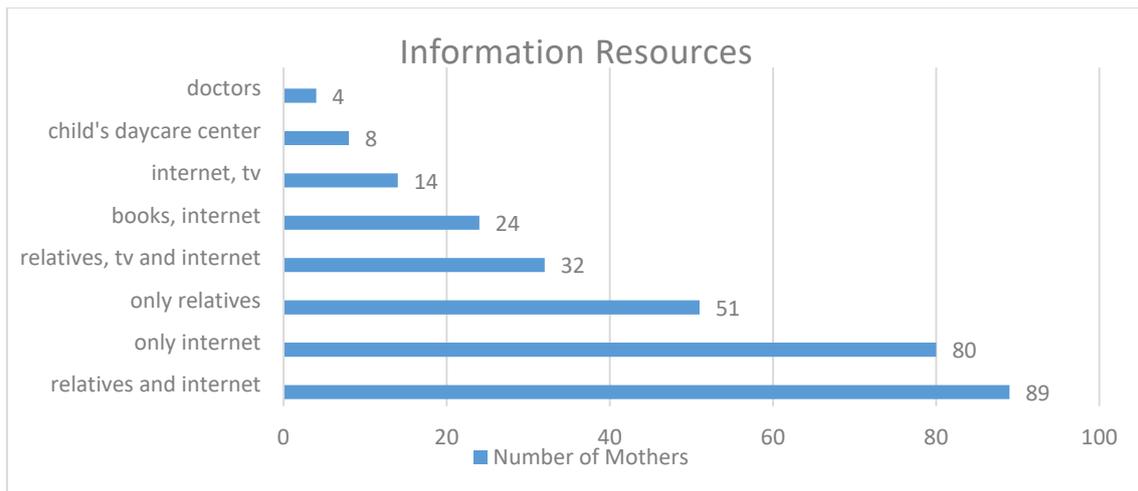


Figure 2 Mothers' information resources

Figure 2 shows that, most of the mothers reached the closest ones when they need information about safety and make use of internet. Those who preferred to access to multiple resources correspond to 10.5% of the working group as 32 people. The least referenced sources were doctors and daycare centers. It is also important to understand that which type of information they need and what they are looking for about safety. Figure 3 shows that types of mothers' information need about child safety.

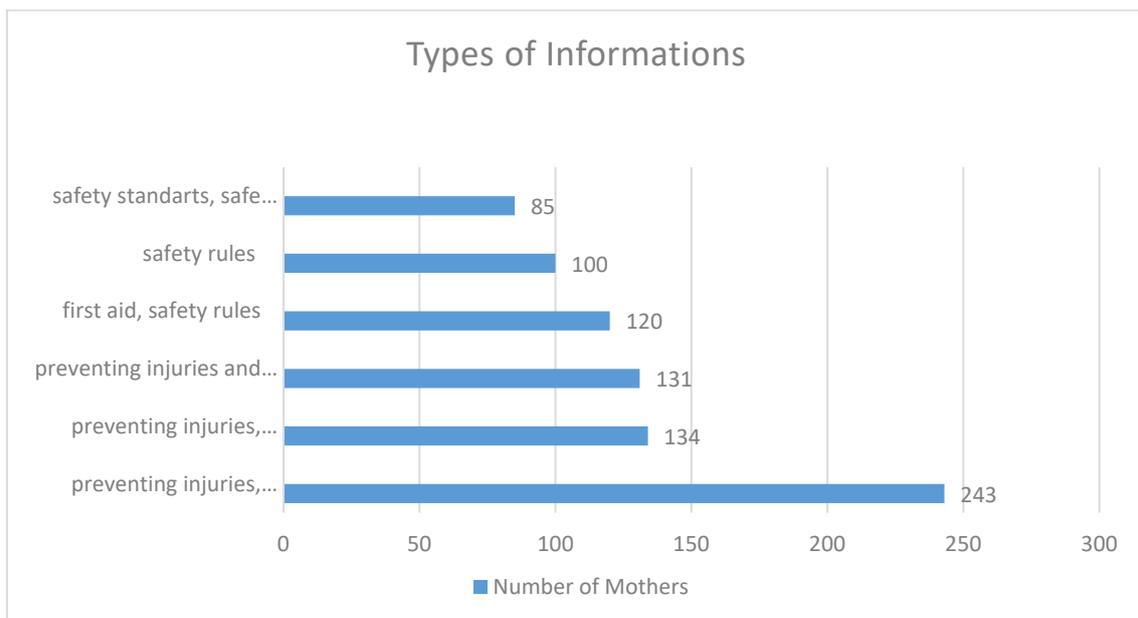


Figure 3 Information that mothers' needs about child safety

Figure 3 shows that 243 mothers (80.4%) needed information about how they can prevent injuries, how they can apply first aid when their children get injured and which materials are safe. The findings demonstrate that most of mothers needed multiple information to keep their children safe.

Discussion

This study focused on determining mothers' perceptions, practices, and needs regarding injuries. The findings showed that preventing early childhood injuries was a complex health issue with reflections on mothers' perceptions and practices. In addition, it has been revealed that mothers have various needs in providing this prevention. The information obtained was discussed in the light of the literature and presented under three different headings.

Mothers Perceive Injuries as “Manageable”

Most of the mothers in the study considered that their children were at moderate to high risk of injury. In addition, the answers given by mothers who had children from different age groups were close to each other.

It is known that the risk that mothers perceive about their children shows whether they can estimate about the occurrence of an injury by giving clues about their knowledge of injuries (Sellström, Bremberg, Gärling & Olof Hörnquist, 2000). It has been determined that the risk perception of parents is also reflected in their preventive practices (Glik, Kronenfeld & Jackson, 1991). Otherwise, it is reflected in the research results that parent cannot foresee the risks and create a natural barrier/barrier in preventing injuries (Smithson, Garside & Pearson, 2011). In addition, parents perceived their children as more risky in some parts of the house and thought that some certain parts of the house had a higher potential for injury. In the present study, parents stated that they perceived the "kitchen" part of the house as the most dangerous. The kitchen is a place where there are more hot objects, sharp tools, or chemicals than any other part of the house. For this reason, fatal and devastating accidents can occur there. Studies show that scald and thermal burn injuries generally occur in the kitchen during food/beverage preparation, and this information consistent with parental concerns (Drago, 2006; Kemp, Jones, Lawson & Maguire, 2014). Therefore, it is not unusual for the kitchen to be seen as an area that requires intense attention, as the place where major accidents can occur.

In the study, it was determined that the types of injuries that mothers were worried mostly about were “falling” and “suffocation”. The possible reason for these concerns is that falling poses a possible risk in every step of young children or parents do not have information about first aid in case of suffocation and being short of breath has the potential to result in death in a short time. In support of this interpretation, a study conducted in Turkey revealed that falling injuries are more common compared to other types of injuries, and there is a significant difference in favor of males (Yurt & Keleş, 2019) In addition, past research shows that children admitted to the hospital for suffocation are usually under the age of four (Wang, et. Al., 2019), that the airway of these children is often blocked by hard metals, toys, or food (Peden Oyegbite & Smith, 2008) and have a high mortality rate (Çaylan et. Al., 2021).

Parents' perceptions of their own efficacy, as well as their risk perceptions and concerns, are also important in their safety behaviors. Participants perceived themselves as above-average on being competent in almost all types of injury. Although the answers given were close to each other, it was observed that they felt themselves competent mostly in preventing suffocation. Mothers' greatest concern was also observed as suffocation, and at this point they may have taken more precautions consistent with their concerns. On the other hand, the relevant literature indicates different results in different samples. For example, in one study, it was found that mothers felt themselves competent most in preventing electric shocks and burns (Lafta, Al-Shatari & Abass, 2014), while in another study, this perception of competence was replaced by preventing fractures and shocks (El Seifi, Mortada & Abdo, 2018).The reason for this diversity may be due to different characteristics such as the age of the parents in the samples, their cultural characteristics, and the types of houses they live in.

Mothers generally use passive measures

The answers of the mothers showed that they resorted to parental, environmental and child-based practices to keep their children safe. Mothers kept their children close to them, removed dangerous objects/blocked access, or explained safety rules to children. But it was seen that mothers most broadly operated “child-based” and “environmental” strategies. This shows that mothers most commonly take passive measures and that their children, who are in a very young age group, can leave the part of the responsibility for their safety to themselves. Past studies have shown that mothers use different strategies according to the child's age and location (Morrongiello, Ondejko & Littlejohn, 2004) and often prefer strategies to restrain their child, keep away their children from dangerous materials and change the environment (Garling & Garling, 1995).

The use of safety materials, which is an important element of environmental strategies, is stated as the most socket saver, then car seat and window / door lock in the current study. It has been observed that the use of these materials varies considerably from one house to another, and there is no family

that has materials on all types of security together. This situation shows that the passive measures taken are also insufficient. On the other hand, qualified safety practices do not only consist of passive measures, and the work of preventing some types of injury involves repetitive active actions. In addition, trying to ensure child-based safety without qualified environmental regulations increases the risk of injury (Morrongiello et al., 2004).

When parents' perceptions of safety and their practices are compared, some contradictory aspects draw attention. The first example of these contradictions is that; while parents are most concerned about falling and suffocating, looking at the precautions they take, it can be said that they commonly have electrical shock prevention material and do not specify specific safety practices for prevention of fall. Moreover, mothers stated that they occasionally do "leaving the child alone/unsupervised for a while", a behavior that can cause many injuries. However, leaving young children unsupervised and unqualified supervision are the primary causes of injury (Morrongiello & Kiriakou, 2004). In studies, the most important strategy used by parents is to keep them close (Morrongiello, Walpole & McArthur, 2009; Vladutiu, Nansel, Weaver, Jacobsen & Kreuter, 2006).

Another example of the identified contradictions is; although mothers state that they perceive the kitchen as the most dangerous place, they do not resort to specific precautions (burns/poisonings, etc.). Unfortunately, the findings obtained in different studies, as in the participants of the current study, show that there may be differences between the perceptions and practices/observations expressed by the parents (Huynh, Demeter, Burke & Upperman, 2017). These contradictions between perceived safety and implemented safety practices can make children vulnerable.

Mothers are in need of multiple information about injuries

The third important finding in the study was that parents needed information about keeping their children safe. First of all, it was determined that the mothers expressed their lack of knowledge about preventing injuries and used limited resources, especially their relatives, to reach the information they had needed. At this point, mothers have adopted the traditional way, and professional and objective information sources have lagged behind them. This may result in incorrect practices and consequences that may harm the children. Similarly, in a study examining parents' knowledge of injuries, it was found that mothers mostly used their own families and secondly their close neighbors and friends as sources of information (Lafta, Al-Shatari & Abass, 2014). In addition, parents thought that learning about injury events through the experiences of nearby parents could help them to estimate their risk of injury (Ablewhite et al., 2015).

Mothers stated that they primarily needed information about first aid, injury prevention and safe materials. In a similar study, it was found that half of the parents felt that they needed more information about dealing with shock and emergency situations in order to prevent childhood injuries (Hu, Wesson, Parkin, & Rootman, 1996). In another study, it was determined that mothers could not respond to injuries properly and had deficiencies especially about first aid (Nageh, El-Raouf & El-Mouty, 2020). However, there are still large gaps in meeting this need for information and developing interventions. As proof of this, the absence of a formal program on child safety in which parents can participate can be given. It is recommended that researchers and program makers turn to safety programs that will eliminate the contradictions of parents' perceptions and practices of security and respond to their needs.

Strengths and limitations

The study enables us to see child safety and injury prevention from mothers' perspective. The findings shed light on the practices of mothers as individuals primarily responsible for ensuring safety. Also, it is a source for future interventions as it reveals what mothers need to keep their children safe.

This study was limited to mothers only who have children aged between 0-36 months. And research also limited with safety questioner which is developed by researchers.

Conclusions

The results of the research show that the competence perceptions of mothers were mostly positive, on the other hand, their competence should be increased in all types of injuries. There were some

contradictions between safety practices and safety perception of mothers. It is observed that the materials and safety practices in their homes were incomplete and inadequate. Mothers used their relatives and internet access information, and they need information especially on issues such as first aid, injury prevention and safe materials.

Future directions

This study was conducted with 302 mothers and their perceptions, practices and current needs regarding child safety were determined. Future researchers can access larger samples that include fathers. In addition, the findings of this study showed that interventions to address the conflicts between mothers' perceptions and practices and to meet their needs are needed recently.

References

- Ablewhite, J., Peel, I., McDaid, L., Hawkins, A., Goodenough, T., Deave, T., ... & Kendrick, D. (2015). Parental perceptions of barriers and facilitators to preventing child unintentional injuries within the home: a qualitative study. *BMC Public Health*, 15(1), 1-9.
- Aitken, M. E., Mele, N., & Barrett, K. W. (2004). Recovery of injured children: parent perspectives on family needs. *Archives of Physical Medicine and Rehabilitation*, 85(4), 567-573.
- Altuntaş, M., Kaya, M., Demir, Ş., Oyman, G., Metecan, A., & Rastgel, H. (2013). Determination of preventable accidents in children between the ages of 0-14 and taking measures associated with them. *Smyrna Medical Journal*, 1, 28-3.
- Çaylan N, Yalçın SS, Tezel B, & Aydın, Ş. (2021). Evaluation of injury-related under-five mortality in Turkey between 2014-2017. *The Turkish Journal of Pediatrics*, 63, 37-47.
- Drago, D. A. (2005). Kitchen scalds and thermal burns in children five years and younger. *Pediatrics*, 115(1), 10-16.
- El Seifi, O. S., Mortada, E. M., & Abdo, N. M. (2018). Effect of community-based intervention on knowledge, attitude, and self-efficacy toward home injuries among Egyptian rural mothers having preschool children. *Plos One*, 13(6), e0198964.
- Gärbling, A., & Gärbling, T. (1995). Mothers' anticipation and prevention of unintentional injury to young children in the home. *Journal of Pediatric Psychology*, 20(1), 23-36.
- Glik, D., Kronenfeld, J., & Jackson, K. (1991). Predictors of risk perceptions of childhood injury among parents of preschoolers. *Health Education Quarterly*, 18(3), 285-301.
- Hogan, C. M., Weaver, N. L., Cioni, C., Fry, J., Hamilton, A., & Thompson, S. (2018). Parental perceptions, risks, and incidence of pediatric unintentional injuries. *Journal of Emergency Nursing*, 44(3), 267-273.
- Hu, X., Wesson, D., Parkin, P., & Rootman, I. (1996). Pediatric injuries: parental knowledge, attitudes and needs. *Canadian Journal of Public Health*, 87(2), 101-105.
- Huynh, H. T., Demeter, N. E., Burke, R. V., & Upperman, J. S. (2017). The role of adult perceptions and supervision behavior in preventing child injury. *Journal of Community Health*, 42(4), 649-655.
- Kemp, A. M., Jones, S., Lawson, Z., & Maguire, S. A. (2014). Patterns of burns and scalds in children. *Archives of Disease in Childhood*, 99(4), 316-321.
- Lafta, R. K., Al-Shatari, S. A., & Abass, S. (2014). Mothers' knowledge of domestic accident prevention involving children in Baghdad City. *Qatar Medical Journal*, 2013(2), 17.
- Landen, M. G., Bauer, U., & Kohn, M. (2003). Inadequate supervision as a cause of injury deaths among young children in Alaska and Louisiana. *Pediatrics*, 111(2), 328-331.
- Ministry of Health. (2020). General Directorate of Public Health Child Safety Ensuring Program. Retrieved November, 15, 2021, from <https://hsgm.saglik.gov.tr/tr/cocukergensgp1/sagl%C4%B1g%C4%B1ngelisitirilmesi/%C3%A7ocuk%C3%B7Cvenli%C4%9Fininsa%C4%9Flanmas%C4%B1-rogram%C4%B1.html>
- Mock, C., Quansah, R., Krishnan, R., Arreola-Risa, C., & Rivara, F. (2004). Strengthening the prevention and care of injuries worldwide. *The Lancet*, 363(9427), 2172-2179.
- Morrongiello, B. A., Bell, M., Park, K., & Pogrebtsova, K. (2016). Evaluation of the Safety Detective program: A classroom-based intervention to increase kindergarten children's understanding of home safety hazards and injury-risk behaviors to avoid. *Prevention Science*, 17(1), 102-111.
- Morrongiello, B. A., & Kiriakou, S. (2004). Mothers' home-safety practices for preventing six types of childhood injuries: what do they do, and why?. *Journal of Pediatric Psychology*, 29(4), 285-297.

- Morrongiello, B. A., Ondejko, L., & Littlejohn, A. (2004). Understanding toddlers' in-home injuries: II. Examining parental strategies, and their efficacy, for managing child injury risk. *Journal of Pediatric Psychology, 29*(6), 433-446.
- Morrongiello, B. A., Walpole, B., & McArthur, B. A. (2009). Brief report: Young children's risk of unintentional injury: A comparison of mothers' and fathers' supervision beliefs and reported practices. *Journal of Pediatric Psychology, 34*(10), 1063-1068.
- Nageh, H., El-Raouf, A., & El-Mouty, A. (2020). Mothers' knowledge and subjective practice toward most common domestic injuries among under-five children. *Mansoura Nursing Journal, 7*(1), 17-35.
- Nilsen, P., Hudson, D. S., Kullberg, A., Timpka, T., Ekman, R., & Lindqvist, K. (2004). Making sense of safety. *Injury Prevention, 10*(2), 71-73.
- Peden, M., Oyegbite, K., Ozanne-Smith, J., Hyder, A. A., Branche, C., Rahman, A. K. M. F. & Bartolomeos, K. (2008). *World report on child injury prevention* (Vol. 2008). Geneva: World Health Organization.
- Sellström, E., Bremberg, S., Gärling, A., & Olof Hörnquist, J. (2000). Risk of childhood injury: predictors of mothers' perceptions. *Scandinavian Journal of Public Health, 28*(3), 188-193.
- Saris, W. E., & Gallhofer, I. N. (2014). *Design, evaluation, and analysis of questionnaires for survey research*. John Wiley & Sons.
- Santagati, G., Vezzosi, L., & Angelillo, I. F. (2016). Unintentional injuries in children up to six years of age and related parental knowledge, attitudes, and behaviors in Italy. *The Journal of pediatrics, 177*, 267-272.
- Siu, G., Batte, A., Tibingana, B., Otwombe, K., Sekiwunga, R., & Paichadze, N. (2019). Mothers' perception of childhood injuries, child supervision and care practices for children 0–5 years in a peri-urban area in Central Uganda; implications for prevention of childhood injuries. *Injury Epidemiology, 6*(1), 1-7.
- Smithson, J., Garside, R., & Pearson, M. (2011). Barriers to, and facilitators of, the prevention of unintentional injury in children in the home: a systematic review and synthesis of qualitative research. *Injury Prevention, 17*(2), 119-126.
- Turkish Statistical Institute. (2017). Statistics of cause of death. Retrieved October, 8, 2020, from <http://www.tuik.gov.tr/PreHaberBultenleri.do?id=27620>
- Vincenten, J. A., Sector, M. J., Rogmans, W., & Bouter, L. (2005). Parents' perceptions, attitudes and behaviours towards child safety: a study in 14 European countries. *International Journal of Injury Control and Safety Promotion, 12*(3), 183-189.
- Vladutiu, C. J., Nansel, T. R., Weaver, N. L., Jacobsen, H. A., & Kreuter, M. W. (2006). Differential strength of association of child injury prevention attitudes and beliefs on practices: a case for audience segmentation. *Injury Prevention, 12*(1), 35-40.
- Wang, L., Gao, Y., Yin, P., Cheng, P., Liu, Y., Schwebel, D. C., ... & Hu, G. (2019). Under-five mortality from unintentional suffocation in China, 2006-2016. *Journal of Global Health, 9*(1).
- World Health Organization. (2008). European report on child injury prevention. Retrieved March,8, 2021 from:<https://apps.who.int/iris/bitstream/handle/10665/326500/9789289042956-eng.pdf>
- Yıldırım N, Kubilay G. (2016). The effectiveness of the home accident prevention program for children aged 1-4. *Journal of Hacettepe University Faculty of Nursing, 3*, 1-13.
- Yurt Ö, Keleş S. (2019). Investigation of injury risk behaviors of 4–5-year-old children in terms of gender, type of injury and context. *Acıbadem Journal of Health Sciences, 10*, 581-588.

This work is licensed under a [Creative Commons Attribution 4.0 International License](https://creativecommons.org/licenses/by/4.0/)

