Assessment of mothers' measures against home accidents for 0–6-year-old children

Annelerin 0–6 yaş çocuklar için ev kazalarına karşı aldıkları önlemlerin değerlendirilmesi

✉ Zehra Aslan Aydoğdu, ✉ Elif Ateş, ✉ Turan Set

Department of Family Medicine, Karadeniz Technical University, Trabzon, Turkey

Cite this article as: Aslan Aydogdu Z, Ates E, Set T. Assessment of mothers' measures against home accidents for 0–6-year-old children. Turk Pediatri Ars 2019; 54(3): 149–56.

Abstract

Aim: Home accidents are one of the important public health problem, especially in childhood, because all can be avoided. We aimed to compare the sociodemographic characteristics of mothers with a child aged 0–6 years in terms of the safety measures they have taken against home accidents.

Material and Methods: Our study was performed between July and December 2017 in the Trabzon, Kalkınma Family Health Center. Two hundred forty-four female volunteer mothers were included in the study. We evaluated the relationship between sociodemographic characteristics and scores from the 'Scale for Identification by Mothers of the Safety Measures Taken by Mothers to Prevent Home Accidents in Children in the 0–6 Age Group.'

Results: The mean age of the participants was 30.8±5.4 years. The frequency of home accidents was 42.6% (n=104). We found significant differences between the scale scores in terms of educational status and income levels (p=0.049, p=0.015). There was no significant correlation between the number of children and scale score (r=-0.067, p=0.299). There was a statistically significant difference between the total score of the scale and the person responsible for the care of the child at home (p=0.027).

Conclusion: The childhood home accidents are important since they are preventable. The present study reveals the risk factors that may form a basis for the studies on preventing the childhood home accidents. In the scale used here, the score of participant determines the risk of home accident. The increase in the number of children in the house increases the risk of home accident.

Keywords: Child protection, home accidents, age 0–6 years

Öz

Amaç: Kazalar ve yaralanmalar, önlenebilir olması nedeniyle özellikle çocukluk çağında dikkat edilip, önlem alınması gereken önemli bir halk sağlığı sorunudur. Çalışmamızda 0–6 yaş grubu çocuğu olan annelerin sosyodemografik özellikleri ile ev kazalarına ilişkin aldıkları güvenlik önlemlerinin karşılaştırılarak değerlendirilmesi amaçlanmıştır.

Gereç ve Yöntemler: Çalışmamız Temmuz 2017 ile Aralık 2017 tarihleri arasında Trabzon ili Kalkınma Aile Sağlığı Merkezi'nde gerçekleştirilmiştir. Çalışmaya 0–6 yaş grubu çocuğu olan 244 kadın gönüllü birey alınmıştır. Katılımcılara demografik bilgiler anketi ve 0–6 Yaş Çocuklarda Ev Kazalarına Yönelik Güvenlik Önlemlerini Tanılama Ölçeği yüz yüze görüşme yöntemi ile uygulanmıştır.

Bulgular: Katılımcıların yaş ortalaması 30,8±5,4 yıl idi. Çocukları ev kazası geçiren annelerin oranı %42,6 (n=104) olarak saptandı. Annelerin eğitim ve gelir durumları açısından aldıkları ölçek puanı arasında anlamlı bir fark saptandı (p=0,049, p=0,015). Çocuk sayısı ile ölçek puanı arasında istatistiksel olarak anlamlı bir korelasyon yoktu (r=-0,067, p=0,299). Ölçekten alınan toplam puan ile bakımdan sorumlu olunan çocuk sayısı arasında istatistiksel olarak anlamlı ilişki saptandı (p=0,027).

Çıkarımlar: Çocukluk çağı ev kazaları önlenebilir olması nedeniyle önemlidir. Çalışmamız çocukluk çağı ev kazalarını önleme çalışmalarına dayanak oluşturabilecek risk etmenlerini ortaya koymaktadır. Kullanılan ölçekte katılımcının aldığı puan ev kazası riski açısından belirleyicidir. Hane içerisinde çocuk sayısının fazla olması ev kazası görülme riskini artırmaktadır.

Anahtar sözcükler: Çocuk koruma, ev kazaları, 0–6 yaş

Introduction

Unexpected death and property loss and incidents that cause injuries are defined as accidents (1), which can be

categorized into types such as home accidents, traffic accidents, and occupational accidents, depending on the location where they occur (2). Those that occur inside or around the house are considered home accidents (3).

Corresponding Author /Sorumlu Yazar: Zehra Aslan Aydoğdu E-mail /E-posta: z.aslanaydogdu@gmail.com

Received /Geliş Tarihi: 21.09.2018 **Accepted /Kabul Tarihi:** 21.06.2019

©Copyright 2019 by Turkish Pediatric Association - Available online at www.turkpediatriarsivi.com

©Telif Hakkı 2019 Türk Pediatri Kurumu Derneği - Makale metnine www.turkpediatriarsivi.com web adresinden ulaşılabilir.

DOI: 10.14744/TurkPediatriArs.2019.64614

OPEN ACCESS This work is licensed under a Creative Commons Attribution-NonCommercial 4.0 International License.

Although numeric data on home accidents in Turkey is not definitive, a study revealed that home accidents constituted approximately 18–25% of all accidents. Further, 50–80% of all fall incidents that result in death among children aged 0–6 years occur at home (4). A study conducted in England found that 48% of childhood injuries occurred at home; of all injuries, 21% are cuts and lacerations (47% occur at home), 19% are hematoma and ecchymosis (48% occurs at home), 13% are fractures (31% occurs at home), 12% are sprains and strains (32% occurs at home), 12% are inflammation and swelling (35% occurs at home), and 6% are superficial abrasions (37% occurs at home) (5).

Accidents affect everyone, but children and elderly people are at higher risk due to their physical characteristics or medical conditions. In several cases of home accidents, individuals at the beginning or final stages of their lives are the most vulnerable.

Small children are known to be curious; however, they are not equipped with the developmental competence to protect themselves from accidents. Furthermore, because they cannot easily maintain balance, home accidents happen to them more often (6). Those most at risk from home accidents are children in the age group of 0–6 years, who mostly spend their preschool period at home (7). Therefore, the responsibility mostly falls upon parents in this regard. In our society, mothers usually take care of children at home; therefore, they have to take measures to prevent against home accidents.

Several studies have examined whether children's sex, personality, the education level of parents, socioeconomic status, the number of people in the household, and children's age have any effects on the risk of facing childhood home accidents (8–13). Home accidents may include suffocation, burns, falls, poisoning, or injuries from stab wounds.

This study aims at comparing and assessing the sociodemographic characteristics of mothers with children aged 0–6 years and the measures taken by them to prevent against home accidents. The objective of this study was to determine the measures taken by mothers in order to avoid home accidents as well as the risk factors for home accidents, and to contribute to future studies on raising awareness about home accidents.

Material and Methods

This study is a cross-sectional analysis and was conducted between July 2017 and December 2017 at the Family Development Health Center (FHC) in Trabzon, Turkey.

The sample group was selected from volunteer women with children aged 0–6 years who were registered at FHC. Individuals who met the study participation criteria (no chronic illness and no reliance on people for care) were provided the necessary information about the study, and a demographic data questionnaire and the Scale for Identification by Mothers of the Safety Measures Taken by Mothers to Prevent Home Accidents in Children in the 0–6 Age Group was used to assess the volunteering participants during face-to-face interviews. Written informed consent was obtained. Ethics committee approval was granted (Date: 07.07.2017, No.: 24237859-415). The study was conducted in accordance with the principles of the Declaration of Helsinki.

To evaluate the mothers' measures against home accidents, the above-mentioned scale developed for Turkey and for which Çınar et al. (14) conducted a validity and reliability study was applied. The scale is a 40-item 5-point Likert-type scale. Example questions are as follows: (1) I keep the bathroom and toilet floor dry, and (2) When choosing furniture, I take care not to have sharp edges and sharp corners, which are scored as 5=Always, 4=Often, 3=Sometimes, 2=Rarely, 1=Never. The maximum and minimum scores that can be received from the scale are 200 and 40. The Cronbach's alpha coefficient of the scale was reported as 0.82, and in this study it was calculated as 0.85.

Considering the study conducted by Sekerci and Inal (15), the percentage of mothers taking safety measures was determined as 30%, and the sample size was calculated as 244. Reliability was calculated as 95% and sampling error as 0.05%.

Statistical Analysis

The data were entered into a computer using the Statistical Package for the Social Sciences (SPSS) 23 package program and statistical calculations were performed by the researchers.

In the scale assessment, a total score was calculated for each participant. Following the identification of statistics, the correlation between the scale scores of the participants depending on the age and number of children was assessed using Pearson correlation analysis, and the correlation between other categorical variables and the total scale scores was evaluated using one-way analysis of variance ANOVA, the Kruskal–Wallis test, and Student's t-test. Post-hoc tests were administered using a Tukey's test. The statistical significance level was taken as $p < 0.05$. The Mann–Whitney U test was used to measure the between-group relationship between the significantly different results of the Kruskal–Wallis test.

Figure 1. Education level of research participants

Figure 2. Accident locations of children who suffered accidents

Factors affecting the scale scores were examined using a linear regression model that included age, number of children, and income level.

Factors affecting accident frequency were examined using a logistic regression model that included scale scores for education level, income level, house condition, the person responsible for childcare, mother's occupation, mother's age, family structure, and the number of children.

Results

In total, 244 women participated in the study and their average age was 30.8±5.4 years. The education level of participants is presented in Figure 1.

The distribution of people responsible for childcare at home was 75.4% (n=184) parents, 14.3% (n=35) family members such as grandmothers, and 10.2% (n=25) nannies.

The frequency of mothers whose children had house accidents was 42.6% (n=104). The number and frequency of accident locations at home are shown in Figure 2.

Figure 3. Type of accidents

The type and frequency of accidents are shown in the Figure 3.

Of those who had home accidents, 53.8% (n=56) presented to a hospital, and 23.2% of those who went to a hospital were admitted (13).

The logistic regression analysis model used to assess factors that affected accident occurrence included scale scores for the level of education, level of income, house condition, person responsible for childcare, mother's occupation, mother's age, family structure, and the number of children. No statistically significant correlation was determined in terms of mother's age ($p>0.05$), mother's occupation ($p>0.05$), level of education ($p>0.05$), family income ($p>0.05$), and family type ($p>0.05$).

The mean scale score of mothers was 176.6±16.2. There was no meaningful correlation between the participants' ages and the scores they received from the scale ($r=0.048$, $p>0.05$).

The Kruskal–Wallis test showed that there was no significant difference between participants' education status and scales scores ($p>0.05$). A statistically significant difference was found between the participants' scale scores and their income levels ($p<0.05$). The Mann–Whitney U test was used to understand which groups had significant between-group differences. A statistically significant difference was found between the participants' total scale scores in terms of their income levels ($p<0.05$), which included those with average monthly income below 1000 TL, in the 2000–5000 TL range ($p<0.05$), and above 5000 TL ($p<0.05$).

One-way ANOVA showed that there was a statistically significant difference between those with nuclear families and those with extended families ($p<0.05$), as well as among their total scores in terms of the person responsible for childcare ($p<0.05$).

A Tukey's post-hoc test revealed that the statistically significant difference was between 'family members' and

Table 1. Comparison of scale scores between groups

Groups	n	Minimum score	Maximum score	Mean score±SD ^a	P value
Education					0.335 ^b
Illiterate	4	132	190	155.75±24.60	
Primary school	46	129	200	174.98±20.86	
Elementary education	26	142	198	175.46±15.53	
High school	77	102	200	176.16±16.27	
University and graduate degree	91	138	200	179.11±13.89	
Income levels					0.029 ^b
Below 1000 TL	7	138	187	162.00±19.48	
1000–000 TL range	92	129	199	174.38±15.92	
2000–5000 TL range	116	102	200	178.35±16.10	
Above 5000 TL	29	155	200	180.38±14.24	
Family types					0.010 ^c
Nuclear families	212	102	200	177.65±15.40	
Extended families	32	131	200	169.81±19.48	
Person responsible for childcare					0.027 ^d
Family members	35	131	200	169.94±18.88	
Parents	184	102	200	177.58±15.77	
Caretaker	25	155	200	179.00±13.00	
Total	244	102	200	176.62±16.17	

^aSD: Standard deviation; ^bKruskal–Wallis Test (significant between-group differences were measured using a Mann–Whitney U test); ^cIndependent Samples Test; ^dOne Way Anova Test (A Tukey's post-hoc test showed that the significant difference was between Family Members and Parents ($p<0.05$). No significant difference was found between Caretaker and other groups ($p>0.05$).

Table 2. Scale scores of mothers whose children suffered and did not suffer home accidents

Home accident history	n	Minimum score	Maximum score	Mean score±SD ^a	P value
Suffered home accidents	104	129	200	170.6±15.8	<0.001 ^b
Did not suffer home accidents	140	102	200	181.1±15.0	

^aSD: Standard deviation; ^bIndependent Samples Test

'parents' ($p<0.05$). There was no significant difference between 'caretaker' and the other groups ($p>0.05$) (Table 1).

We also found a significant difference ($p<0.05$) between the total scale scores of participants who were house owners and those who were tenants. The average scale score of mothers who resided in their own house was 178.7 ± 16 , whereas for those who were tenants it was 17.2 ± 15.2 .

The independent samples test showed that there was a statistically significant difference ($p<0.001$) between the home accident history and questionnaire scale score average. The mean scale score of mothers whose children did and did not have a home accident and the minimum and maximum scores they received on the scale are presented in Table 2.

Factors influencing scale scores were examined through

a linear regression model that included scores for age, number of children, and income level. The linear regression model was found to be statistically significant ($p<0.001$). In this model, scores for the number of children was mainly effective on the scale score ($p<0.05$).

In the logistic regression model we used to examine factors influencing the likelihood of having an accident, we calculated that those with a high scale score affected the likelihood of having an accident 0.95-fold and that they were preventive. We also calculated that when the number of children increased, the frequency of home accidents increased 1.9 times (Table 3).

Discussion

Home accidents are a worldwide public health problem and they are also a significant cause of death and morbidity. It is known that children and the elderly are at

Table 3. Results of logistic regression analysis on the factors that affect suffering from accidents

Variables	Odds ratio	%95 CI	P value
Mother age	0.934	0.87–1.00	0.062
Number of children	1.951	1.20–3.10	0.006
Job			
Housewife	1 (ref)		
Official	1.029	0.79–5.82	0.952
Others	2.166	0.40–2.59	0.112
Education			
Illiterate	1 (ref)		
Primary school	1.484	0.01–2.58	0.779
Elementary education	0.253	0.05–11.30	0.760
High school	1.218	0.04–8.12	0.723
University and graduate degree	0.859	0.04–10.98	0.737
Income levels			
Below 1000 TL	1 (ref)		
1000–2000 TL range	0.272	0.23–10.99	0.253
2000–5000 TL range	0.433	0.22–11.63	0.165
Above 5000 TL	0.426	0.41–35.27	0.104
Person responsible for childcare			
Parents	1 (ref)		
Family members	0.545	0.91–5.73	0.248
Caretaker	1.399	0.65–5.09	0.593
Score	0.954	0.93–0.97	<0.001

CI: Confidence interval

greater risk of home accidents. More than 95% of child deaths due to injury occur in low-income and middle-income countries. Approximately, 40% of the deaths of people aged under 18 years in high-income countries are the result of an injury – an indication of the fact that these countries, although doing better, face a serious problem (16).

The average age of mothers who participated in this study was 30.8±5.4 years. This study did not find a significant correlation between mother's age and children having accidents, which is consistent with the study conducted by Sekerci et al. (15).

Of the study participants, 42.6% (n=104) reported that their children had previously had home accidents. The frequency of home accidents was 15.5% in the study by Özmen et al. (10), 73% in a study conducted in Australia (15), 57.2% in the study by Gunduz (17), and 30.2% in another study conducted in Turkey (15). Although the frequencies of home accidents vary in existing studies, none can be underestimated due to the fact that home accidents are preventable.

This study found that most accidents (40.2%) occurred in the living room. The second most frequent place was the bedroom (27.4%), followed by the kitchen (20.5%), and bathroom and toilet (8.5%). A study conducted in Tehran found the living room to be the place where most accidents occurred, at a rate of 36.96% (18). The study conducted by Sekerci and Inal (15) identified living rooms, at a rate of 62.5%, to be the most frequent place for home accidents, followed by kitchens, at a rate of 13.7%. The living room has been determined as the place where most home accidents occur, which could result from the fact that living room is where children spend most of their time.

We determined falls as the most frequent type of accident at a rate of 67.3%, followed by burns at 15.9%, poisoning at 6.2%, stab wounds at 4.4%, electrical shocks at 3.5%, drowning at 1.8%, and furniture falling on children at 0.9%. A study conducted in Tehran also determined falling as the most frequently seen home accident at a rate of 63% (18). Another study found 55% falling, 30% burns, 10% cuts, and 5% other accidents (15). The fact that falling is the most frequently seen home accident in this study

as well as in the literature can be linked to the fact that children aged between 0 and 6 years do not have a fully developed body balance.

The average mothers' scale score in the present study was 176.6 ± 16.2 . The scale score average in the study by Gunduz, similar to ours, was reported as 179.7 ± 12.9 (17). In the study conducted by Özmen et al. (10), the average scale score of mothers was found as 76.9 ± 12.5 . Similar to other studies (9, 15), this study found no significant correlation between mothers' ages and the total score received on the scale. We found no significant difference between the mothers' education status and scale scores. However, in Gündüz's study, there was a statistically significant difference between mothers' education status and scale scores (17). In another study conducted with mothers of hospitalized children, a significant positive correlation was determined between mothers' education level and scale scores (15). Contrary to the aforementioned studies, Çiçek et al. (13) showed that mothers who graduated from primary school were more likely to take safety measures against home accidents compared with those with high school and college degrees.

A significant correlation was detected in this study between the income level of families and their scale scores. Similarly, in the literature, a significant correlation in the same direction between monthly income and the scale score has been reported (15). The increase in income and scale score observed in the literature and in this study suggests the idea that families with low income levels cannot sufficiently afford expensive measures.

When the average scale scores are compared according to the type of family, mothers living in nuclear families seemed to have the highest score average and mothers living in extended families were found to have the lowest average scale score (17). Furthermore, previous studies have not reported a statistically significant difference between types of families and scale scores (15, 17). Different from such studies, a significant correlation was detected between family types and score scale. This can be explained by the possibility that mothers from nuclear families might have become highly conscious due to the fact that they do not share the responsibility of childcare with third parties.

A significant difference was also reported between those living in a rented house and those who were homeowners, and the homeowners' scale score was found higher than for tenants'. This situation generated the possibility that families with rented houses might be less inclined to take permanent safety measures, such as putting bars on windows, closing off balconies, or placing thick safety rails.

In the literature, the average scale scores of mothers of children who had home accidents were reported statistically significantly lower than the scores of mothers whose children had not had accidents (9, 17). However, a study reported that the scale scores of mothers whose children had home accidents were higher and statistically significant (10).

In the present study, a statistically significant difference was reported between the scale scores of mothers whose children had a home accident and those who did not, and the average scale score of mothers whose children did not have a home accident was found as 181.1 ± 15.0 , and those whose children who had an accident had a mean scale score of 170.6 ± 15.8 . Similar to some studies, high scale scores of mothers with children who had not had a home accident suggested that these parents might be taking more safety measures against home accidents, and, as a result, their children might have home accidents less frequently.

Raising awareness of mothers and other family members and monitoring the child during the presentation of first stage health services and during the education period might be effective in accident prevention. Undoubtedly, children, especially those aged 0–6 years, are in need of constant care and protection. Protecting a child is the duty of society as a whole, but particularly of parents.

It is actually the initial duty of doctors to build a patient–doctor relationship based on mutual confidence, where various secrets can be shared. This is the best way, both in stages of diagnosis and treatment, and in exposing hidden trauma. One should remember that when all sorts of traumas or abuse are not exposed, it might lead to irreparable critical consequences, including death (19). It is crucial to be on an alert for signs of neglect and abuse in every stage of healthcare provision and to examine a child both physically and mentally with this sense of responsibility and consciousness.

However, physicians should not forget that their responsibility starts in the prevention stage, long before diagnosis. It is important to inform families who will take on childcare responsibilities about all aspects of causes of accidents prior to birth. During the postpartum period, the child must be carefully examined and monitored, in addition to reminding families of safety measures particular to the age group of their children. This study holds that with an integrated approach, new generations, who are the safeguards of our future, can be physically and mentally protected from all kinds of neglect, abuse, and accidents.

The present study reveals the risk factors that may form a basis for the studies on preventing the childhood home accidents. According to the logistic regression analysis, the score of participant in the scale used here determines the risk of home accident. The increase in the number of children in the house increases the risk of home accident.

The primary limitation of this study is that it was conducted in only one FHC. It is recommended that studies that are to be conducted for globally effective initiatives should be conducted in more centers, in a way that will reflect the society at large.

This study is cross-sectional, and the data was retrieved through face-to-face interviews and with statements from individuals. Especially in determining the history of home accidents, along with private statements, record systems are thought to provide reliable evidence. In statements where there is no history of home accidents or no medical presentations, interviews that are conducted with other members of the family may increase data reliability.

Similarly, direct observation of people's living spaces, if and when possible, in order to determine whether all measures are actually applied as stated, would allow a study to yield more accurate results. Applying a scale for the identification of safety measures to mothers before and after their children had an accident and comparing these scores may be the subject of a new study.

Ethics Committee Approval: Ethics committee approval was received for this study from ethics committee of the Faculty of Medicine of Karadeniz Technical University (07.07.2017, 24237859-415).

Informed Consent: Written informed consent was obtained from the participants.

Peer-review: Externally peer-reviewed.

Author Contributions: Concept - Z.A.A., E.A.; Design - Z.A.A., E.A.; Supervision - T.S., E.A.; Funding - Z.A.A.; Materials - Z.A.A.; Data Collection and/or Processing - Z.A.A.; Analysis and/or Interpretation - Z.A.A., E.A., T.S.; Literature Review - Z.A.A.; Writing - Z.A.A.; Critical Review - E.A., T.S.

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

Financial Disclosure: The authors declared that this study has received no financial support.

Etik Kurul Onayı: Bu çalışma için etik kurul onayı Karadeniz Teknik Üniversitesi Tıp Fakültesi Etik Kurulu'ndan alınmıştır (07.07.2017, 24237859-415).

Hasta Onamı: Katılımcılardan yazılı bilgilendirilmiş onam alınmıştır.

Hakem Değerlendirmesi: Dış bağımsız.

Yazar Katkıları: Fikir - Z.A.A., E.A.; Tasarım - Z.A.A., E.A.; Denetleme - T.S., E.A.; Veri Toplanması ve/veya İşlemesi - Z.A.A.; Analiz ve/veya Yorum - Z.A.A., E.A., T.S.; Literatür Taraması - Z.A.A.; Yazıyı Yazan - Z.A.A.; Eleştirel İnceleme - E.A., T.S.

Çıkar Çatışması: Yazarlar çıkar çatışması bildirmemişlerdir.

Mali Destek: Yazarlar bu çalışma için mali destek almadıklarını beyan etmişlerdir.

References

1. Güler Ç, Çobanoğlu Z. Kazalar ve Önlenmesi. 1st edition. Ankara: Çevre Sayısı Temek Kaynak Dizisi; 1994. p. 13.
2. Sütölük Z, Savaş N, Demirhindi H, Özden N, Akbaba M. Çukurova Üniversitesi Tıp Fakültesi büyük acil servisine ev kazaları nedeniyle başvuranların etiyolojik ve demografik özellikleri. Toplum Hekimliği Bülteni 2007; 26: 29–34.
3. Büyük ET, Çavuşoğlu F, Teker E. Sıfır altı yaş arası çocuğu olan annelerin ev kazalarına yönelik güvenlik önlemlerinin tanılanması. Düzce Üniversitesi Sağlık Bilimleri Enstitüsü Dergisi 2015; 5: 17–22.
4. Turan T, Altundağ Dünder S, Yorgancı M, Yıldırım Z. 0-6 yaş grubu çocuklarda ev kazalarının önlenmesi. Ulus Travma Acil Cerrahi Dergisi 2010; 16: 552–7.
5. Morrison A, Stone DH, Doraiswamy N, Ramsay L. Injury surveillance in an accident and emergency department: a year in the life of CHIRPP. Arch Dis Child 1999; 80: 533–6.
6. Bahadır G.B, Oral A, Güven A. Çocukluk çağı travmaları ve önlenmesinde koruyucu hekimliğin rolü. TAF Prev Med Bull 2011; 10: 243–50.
7. Runyan CW, Casteel C, Perkis D, et al. Unintentional injuries in the home in the United States: Part I: Mortality. Am J Prev Med 2005; 28: 73–9.
8. Hjern A, Ringbäck-Weitof G, Andersson R. Socio-demographic risk factors for home-type injuries in Swedish infants and toddlers. Acta Paediatr 2001; 90: 61–8.
9. Karatepe TU, Akış A. 0-6 yaş çocuklarda ev kazası geçirme sıklığı ve ilişkili faktörler. Uludağ Üniversitesi Tıp Fakültesi Dergisi 2013; 39: 165–8.
10. Özmen D, Ergin D, Şen N, Çakmakçı-Çetinkaya A. 0-6 yaş grubu çocuğu olan annelerin ev kazalarına yönelik güvenlik önlemlerinin tanılanması. Sosyal Politika Çalışmaları Dergisi 2007; 9: 13–20.
11. Yılmaz-Kurt F, Aytekin A. 0-6 yaş grubu çocuklarda ev kazaları. HSP 2015; 2: 22–32.
12. Morrongiello BA, Ondejo L, Littlejohn A. Understanding toddlers' in-home injuries: I. Context, correlates, and determinants. J Pediatr Psychol 2004; 29: 415–31.

13. Yıldız Çiçekler C, Konuk ER R, Alakoç Pirpir D, Büyük-bayraktar Ç. 0-6 yaş grubunda çocuğu olan annelerin ev kazalarına yönelik güvenlik önlemlerinin çeşitli değişkenlere göre incelenmesi. Ç.Ü. Sosyal Bilimler Enstitüsü Dergisi 2012; 21: 157–74.
14. Çınar N. 0-6 Yaş grubu çocukların ev kazalarından korunmasında ailenin rolü. Klinik Çocuk Forumu 2004; 4: 62–6.
15. Şekerci E, Sevil İ. Hastanede yatan 0-6 yaş grubu çocukların annelerinin ev kazaları konusundaki bilgi ve uygulamalarının incelenmesi. HSP 2016; 3: 160–72.
16. World Health Organization. World Report on Child Injury Prevention [electronic resource]. Available from: URL: http://www.who.int/violence_injury_prevention/child/injury/world_report/en/. Access date 04.01.2017.
17. Gündüz G, Aytekin A. Annelerin çocuklarını ev kazalarından korumaya yönelik tutumları ve etkileyen faktörler. İzmir Dr. Behçet Uz Çocuk Hast. Dergisi 2015; 5: 184–92.
18. Younesian S, Mahfoozpour S, Ghaffari Shad E, Kariman H, Hatamabadi HR. Unintentional home injury prevention in preschool children; a study of contributing factors. Emerg (Tehran) 2016; 4: 72–7.
19. Aydoğdu Hİ, Ketenci HÇ, Boz H, Kırıcı GS, Özer E. Kardiyak penetrasyona sebep olan ev kazası sonucu ölüm olgusu. İzmir: 14 Adli Bilimler Kongresi; May 11-14, 2017.