The Home Accident Cases Presenting to the Pediatric Emergency Department During the Covid-19 Pandemic: What did the Pandemic Change?

Covid-19 Pandemisinde Çocuk Acil Servise Başvuran Ev Kazası Olguları: Pandemi Neyi Değiştirdi?

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ABSTRACT

Objectives: No study evaluating home accident (HAs) cases who applied to the pediatric emergency department (PED) during a pandemic in Turkey. Whether the pandemic caused an increase in the number of presented to PED was investigated.
Methods: The study was a retrospective cohort study. Applications in a similar quarter in 2019 and 2020 were compared.
Results: There were 700 and 597 admissions for specified reasons during the specified period in 2019 and 2020, respectively. In 2020, one out of every five (24.43%); in 2019, one out of every ten children (9.46%) was evaluated as HAs. The male/female ratios were similar (p=0.520). The median age in 2020 (36 months) was significantly higher than that in 2019 (33 months) (p=0.010). Percentages of falls, gastric/intestinal foreign bodies, and penetrating stab injuries were significantly higher in those in 2020 (p<0.001). Significant differences were also found regarding diagnostic and therapeutic interventions. During the specified period in 2019, 623 patients (89.5%) were discharged from the PED. The rate of discharge in 2020 (84.9%) was significantly lower. Also, there were considerably more hospitalizations in other wards in 2020 than in 2019 (3.7% vs. 1.0%) (p=0.004).
Conclusions: The Covid-19 pandemic caused an increase in the number of HAs cases presented to the PED relative to all hospital admissions. The most common type of accident was falls, as in the non-pandemic period. The pandemic caused delays in accessing healthcare services, especially for critically ill patients, more frequent hospitalizations, and a decrease in the rate of discharge from the PED.

Keywords: children, Covid-19, home accidents, pediatric emergency department

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ÖZET

Amaç: Türkiye'de pandemi döneminde Çocuk Acil Servise (ÇAS) başvuran ev kazası olgularını değerlendiren bir çalışma bulunmamaktadır. Pandeminin ÇAS'a başvuran hasta sayısında artışa neden olup olmadığı araştırılmıştır.
Yöntem: Çalışma, retrospektif-kohort çalışmadır. 2019 ve 2020 yıllarında benzer bir çeyrekte yapılan başvurular karşılaştırıldı.
Bulgular: 2019 ve 2020 yılları benzer dönemlerinde sırasıyla 700 ve 597 hasta ev kazası nedeniyle başvurmuştu. 2020 yılında her beş (%24.43); 2019 yılında her 10 çocuktan biri (%9.46) ev kazası olarak değerlendirildi. Erkek/kız oranları benzerdi (p=0.520). 2020'deki ortanca yaş (36nay), 2019'dakinden (33 ay) anlamlı derecede yüksekti (p=0.010). Düşme, mide/bağırsak yabancı cisimleri ve delici delici bıçak yaralanmalarının yüzdeleri 2020'de anlamlı derecede yüksekti (p<0.001). Teşhis ve terapötik müdahaleler açısından da önemli farklılıklar bulundu. 2019 yılında belirtilen dönemde 623 hasta (%89.5) ÇAS'dan taburcu olmuştu. 2020'de taburcu olma oranı (%84.9) önemli ölçüde daha düşüktü. Ayrıca, 2020'de diğer servislere 2019'a göre önemli ölçüde daha fazla hastane yatışı oldu (%3.7'e %1.0) (p=0,004).
Sonuç: Covid-19 pandemisi, ÇAS'a başvuran ev kazaları olgularında artışa neden olmuştur. Pandemi olmayan dönemde olduğu gibi, pandemide de en yaygın kaza türü düşme ilişkili yaralanmalardır. Pandemi, özellikle kritik hastalarda sağlık hizmetlerine erişimde gecikmelere, daha sık hastaneye yatışlara ve ÇAS'dan taburcu olma oranlarının düşmesine neden olmuştur.

Anahtar Sözcükler: Covid-19, çocuk, çocuk acil servis, ev kazaları

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INTRODUCTION

A new type of coronavirus called pneumonia-associated SARS-CoV-2 (Severe Acute Respiratory Distress Syndrome Coronavirus 2) was reported for the first time in Wuhan in the Hubei Province of China in late December 2019. In the following weeks, the virus spread to all parts of China and the world afterward. The World Health Organization (WHO) declared the outbreak a Public Health Emergency of International Concern on January 30, 2020, named the disease as coronavirus disease 2019 (Covid-19) on February 12, 2020, and declared a pandemic on March 11, 2020 (1).

The first case in Turkey was reported on March 10, 2020, and since then, measures have been introduced to limit the spread of the disease in local communities by preventing people from forming crowded groups. In this context, the first measure was closing educational institutions starting from March 16, 2020, until an unspecified date. Later, the restrictions were further expanded with the "stay at home" orders and by banning children and adolescents under 20 from leaving home after April 4, 2020. Since then, children have continued their education at home. Distance education programs have been created by the Ministry of National Education. All kindergartens were also closed until June 1, 2020. After this date, state-controlled nurseries and kindergartens stopped education, while private nurseries and kindergartens continued their education. However, since the first day of the incident in our country, due to the fear in society, many institutions have reduced the number of employees and switched to flexible working hours to reduce the number of people in contact. In this way, parents started to stay at home with their children. Therefore, there has been a decrease in the number of children attending kindergarten. As a result of these restrictions, children whose living areas were limited to homes started to come to the emergency departments due to home accidents during their stay at home.

Home accidents (HAs) are among the most common causes of mortality and morbidity in children and constitute a substantial part of admissions to emergency departments. The leading cause of HAs differs by age group; most occur in children five years and younger. Falls, burns, poisoning, and related complications are common in accidents at or around the home (2-4).

This study aimed to determine whether there was an increase in the number of home accidents presented to emergency departments because children and adolescents under 18 were subject to stay-at-home orders during the pandemic.

MATERIALS and METHOD

The study was conducted in the Pediatric Emergency Department (PED) of a university providing tertiary healthcare services in Ankara, the capital city of Turkey. Our hospital is located in the center of Ankara due to its location. Our PED serves approximately 45,000 pediatric patients annually in the pre-pandemic period. Due to the area of our hospital, our patients are often the children of families with a high socio-cultural level.

The HAs cases that were presented to our PED within the three-month period from March 11, 2020, to June 10, 2020, were recorded in the data form. The home accident cases in the same period in 2019 were also recorded and investigated retrospectively. For the cases that were presented in these periods, the demographic data, the reason for admission to the hospital, the time of entry, the length of hospital stay, the rate of intensive care, and the interventional procedures (endoscopy, bronchoscopy, surgery, etc.) were recorded. The two groups were compared in order to find any differences between the two groups.

Home accidents were classified as falls, poisoning (with drugs and non-drug substances), caustic/corrosive ingestion, foreign body ingestion or aspiration, stab injuries, suffocation, and burns. Considering the age groups where the home accidents were common, the patients were divided into two groups ≤ 5 or > 5 years old. Age groups were divided into two groups in 2017 and 2018 due to the fact that the number of children who died in home accidents due to external injuries and poisoning was higher in the group under the age of five, according to the data of the Turkish statistical institute (5).

Suture/tissue adhesive applications for the treatment of minor lacerations and cast applications in the treatment of extremity fractures were defined as minor surgical procedures. Life-saving interventions, including bag-valve-mask (BVM) ventilation, intubation, surgical airway, continuous positive airway pressure (CPAP), bilevel positive airway pressure (BiPAP), defibrillation, cardioversion, external pacing, needle thoracostomy, pericardiocentesis, thoracotomy, intraosseous intervention, marked fluid resuscitation, blood transfusion, significant bleeding control, and the use of naloxone, dopamine, atropine, or 50% dextrose, were also determined and recorded in the data form according to the Emergency Severity Index (ESI) (6).

Ethical approval

The approval was obtained from the local ethics committee before the study (dated 06.06.2020, numbered 6).

Statistical analysis

Descriptive statistics were given as mean ± standard deviation or median [minimum-maximum] for continuous variables depending on their distribution. Numbers and percentages were used for categorical variables. The normal distribution of the numerical variables was analyzed by the Kolmogorov-Smirnov test and checked by Q-Q plots and histograms.

In comparing two independent groups, the Mann-Whitney U test was applied for variables without normal distribution. Pearson chi-square and Fisher's exact tests were used in 2x2 tables to compare the differences regarding categorical variables. Statistical analyses were performed with Jamovi (version 1.6.3, retrieved from https://www.jamovi.org) and JASP (version 0.13.1, retrieved from https://jasp-stats.org). The significance level (p-value) was set at 0.05 in all statistical analyses.

RESULTS

There were 700 and 597 pediatric admissions during the specified periods of 2019 and 2020, respectively. The demographic and clinical characteristics of the patients are summarized in Table 1. In 2019, 9.46% of the cases presented to the PED were HAs; this rate was 24.43% in 2020. The ratio of female and male patients was similar in both periods (p=0.520). The median age of the children presented in 2020 was significantly higher than that in 2019 (36 months vs. 33 months) (p=0.010). The children aged ≤5 were more commonly given in both periods (p=0.463). The rate of patients referred from an initial receiving hospital significantly increased from 10.5% in 2019 to 18.4% in 2020 (p<0.001). Emergency medical services were used considerably and more frequently for these patients in 2020 (p=0.011). A comparison of monthly admissions between 2019 and 2020 revealed no significant difference between the admissions during 11-31 March 2019 and 2020. Still, the percentage of patients presented during April 2020 was higher than in April 2019 (38.5 % vs. 25.3%). The hospital application rates in May or 1-10 June 2020 were significantly lower than those in 2019 (p<0.001). There was no significant difference between the groups regarding the time of admission and the time to hospital admission (p=0.732 and p=0.147, respectively).

Table 1. Demographic and clinical features of the study groups

Variable†	2019 *(n=700)*	2020 *(n=597)*	p
Sex			
Female	329 (47.0)	269 (45.1)	0.520
Male	371 (53.0)	328 (54.9)	
Age (month)	33.0 [1.0 – 213.0]	36.0 [2.0 – 267.0]	**0.010**
Age †			
≤5 years	502 (71.7)	417 (69.8)	0.463
>5 years	198 (28.3)	180 (30.2)	
Date of admission			
March	163 (23.3)	140 (23.5)	**<0.001**
April	177 (25.3)*	229 (38.5)*	
May	267 (38.1)*	169 (28.4)*	
June	93 (13.3)*	57 (9.6)*	
Time of admission			
08:00 - 16:00	214 (30.6)	181 (30.8)	0.732
16:00 - 24:00	390 (55.7)	335 (57.0)	
24:00 - 08:00	96 (13.7)	72 (12.2)	
Admission status			
Referred	73 (10.5)	109 (18.4)	**<0.001**
Direct admission	620 (89.5)	483 (81.6)	
Type of admission			
Self-presented	680 (97.1)	560 (94.1)	**0.011**
EMS	20 (2.9)	35 (5.9)	
Time to hospital admission			
1 hour	306 (51.7)	311 (56.2)	0.147
1-3 hours	155 (26.2)	127 (23.0)	
3-6 hours	32 (5.4)	42 (7.6)	
6-12 hours	36 (6.1)	26 (4.7)	
>12 hours	63 (10.6)	47 (8.5)	
Main clinical presentation			
Falls	422 (60.4)*	406 (68.0)*	**<0.001**
Poisoning - drugs	34 (4.9)	17 (2.8)	
Poisoning - other	3 (0.4)	4 (0.7)	
Ingestion of corrosives	7 (1.0)	8 (1.3)	
Respiratory foreign body	2 (0.3)	5 (0.8)	
Esophageal foreign body	2 (0.3)	2 (0.3)	
Gastrointestinal foreign body	22 (3.1)*	8 (1.3)*	
Penetrating stab injury	35 (5.0)*	55 (9.2)*	
Others	172 (24.6)*	92 (15.4)*	

† Data shown as n (%) or median [min-max].
* Significant difference between the subgroups.
EMS: emergency medical services

The main clinical presentations showed significant differences between the groups. The proportion of falls, gastric/intestinal foreign bodies, and penetrating stab injuries was significantly higher in 2020 (p<0.001).

We detected significant differences between the groups in diagnostic and therapeutic interventions (Table 2). Although minor surgical procedures were the most common treatment procedures in both groups, they were more frequently performed in 2020 (p<0.001). There were no significant differences between the groups regarding the type of urgency, the ESI triage categories, the Glasgow Coma Scale (GCS) scores at admission, and the kind of poisoning (p>0.05).

In 2019, there was a homogenous distribution concerning the number of sources. However, comparing the percentages for the number of sources showed significant differences between the groups. Lack of any source was seen in 16.2% of the patients in 2020, contrary to 30.8% of the cases in 2019. There was also more > than one source in 2020. During the study period in 2019, 623 patients (89.5%) were discharged from the PED. Concerning the rate of discharge in 2020 (84.9%), this difference was statistically significant. Besides, there were significantly more hospitalizations in other wards in 2020 than in 2019 (3.7% vs. 1.0%) (p=0.004) (Table 2).

Table 2. Comparison of diagnostic and therapeutic features concerning emergency service admissions, interventions and outcomes.

Variable†	2019 *(n=700)*	2020 *(n=597)*	p
Type of urgency			
Green	0 (0.0)*	8 (1.3)*	
Yellow (Emergency)	700 (100.0)*	579 (97.6)*	**<0.001**
Red (Urgency)	0 (0.0)*	6 (1.0)*	
GCS	15.0 [13.0 – 15.0]	15.0 [14.0 – 15.0]	0.913
ESI			
ESI 1-2 (resuscitation-emergent)	0 (0)	2 (0.3)	
ESI 3 (urgent)	0 (0)	264 (44.2)	NA
ESI 4 (less urgent)	0 (0)	235 (39.4)	
ESI 5 (non-urgent)	0 (0)	96 (16.1)	
Type of poisoning			
Suicidal	12 (27.9)	11 (40.7)	0.395
Accidental	31 (72.1)	16 (59.3)	
Diagnostic interventions			
X-ray radiography	271 (38.7)	148 (24.8)	**<0.001**
Ultrasonography	3 (0.4)	0 (0.0)	0.254
Computed tomography	29 (4.1)	23 (3.9)	0.902
Biochemical analysis	87 (12.4)	27 (4.5)	**<0.001**
Electrocardiogram (%)	27 (3.9)	0 (0.0)	**<0.001**
Therapeutic interventions			
Observation only	338 (48.3)	241 (40.4)	**0.005**
Intravenous hydration	44 (6.3)	18 (3.0)	**0.009**
Gastric lavage	9 (1.3)	0 (0.0)	**0.005**
Charcoal	16 (2.3)	0 (0.0)	**0.001**
Antidote	1 (0.1)	0 (0.0)	0.999
Endoscopy	2 (0.3)	0 (0.0)	0.503
Minor surgical procedures	176 (25.1)	253 (42.4)	**<0.001**
Major surgical procedures	1 (0.1)	5 (0.8)	0.100
Others	0 (0.0)	6 (1.0)	**0.009**
ESI resource utilization			
0	215 (30.8)*	97 (16.2)*	
1	238 (34.1)	234 (39.2)	**<0.001**
>1	245 (35.1)*	266 (44.6)*	
Outcome			
Short-term observation in ED	64 (9.2)	65 (10.9)	
Hospitalization in pediatric wards	1 (0.1)	0 (0.0)	
Hospitalization in ICU	1 (0.1)	3 (0.5)	**0.004**
Hospitalization in other wards	7 (1.0)*	22 (3.7)*	
Discharge	623 (89.5)*	505 (84.9)*	
Length of hospital stay (day)	1.0 [1.0 – 6.0]	1.0 [1.0 – 6.0]	0.799

† Data shown as n (%) or median [min-max].

* Significant difference between the subgroups.

ESI: Emergency Severity Index, GCS: Glasgow Coma Scale, ED: emergency department, ICU: intensive care unit

A comparison of demographic and clinical characteristics of the cases based on the date of admission in 2020 is shown in Table 3. The proportion of female patients was significantly higher during the period of May 1 to June 10 (p=0.015). The ratio of female patients increased progressively from 35.0% to 52.65 during the study period. The median age of the patients was significantly lower in this period compared to those from March 11 to April 30 (p=0.023). The majority of the admissions occurred between 4 PM and 0 AM.

A significant difference was found in the distribution of admission time in different months (p=0.029) (Table 3). However, the admission status, the type of admission, the time to hospital admission after the event, and the distribution of the main clinical presentations were similar in the patients presented in different months (p>0.05).

The distributions of application complaints in two years by age group are shown in Table 4. In both periods, the most common reason for visiting the emergency room was falls in those under five years. Significant differences were found between the age groups regarding the complaints at admission in both years (p<0.001 for both).

Table 3. Comparison of demographic and clinical characteristics of the admissions based on the admission month.

Date of admission					
Variable[†]	**11-31 March, 2020** (n=140)	**April, 2020** (n=229)	**May, 2020** (n=169)	**1-10 June 2020** (n=57)	***p***
Sex					
Female	49 (35.0)	102 (44.5)	88 (52.1)	30 (52.6)	**0.015**
Male	91 (65.0)	127 (55.5)	81 (47.9)	27 (47.4)	
Age (month)	42.0 [25.0 – 74.5]	36.0 [21.0 – 69.0]	33.0 [18.0 – 66.0]	33.0 [17.0 – 72.0]	**0.023**
Age					
≤5 years	90 (64.3)	161 (70.3)	124 (73.4)	41 (71.9)	0.362
>5 years	50 (35.7)	68 (29.7)	45 (26.6)	16 (28.1)	
Time of admission					
08:00 - 16:00	43 (31.4)	57 (25.3)	63 (37.5)	18 (31.6)	**0.029**
16:00 - 24:00	81 (59.1)	143 (63.6)	77 (45.8)	33 (57.9)	
24:00 - 08:00	13 (9.5)	25 (11.1)	28 (16.7)	6 (10.5)	
Admission status					
Referred	22 (16.1)	37 (16.3)	34 (20.1)	16 (28.1)	0.169
Direct admission	115 (83.9)	190 (83.7)	135 (79.9)	41 (71.9)	
Type of admission					
Self-presented	133 (95.0)	214 (93.9)	154 (91.7)	57 (100.0)	0.100
EMS	7 (5.0)	14 (6.1)	14 (8.3)	0 (0.0)	
Time to hospital admission					
1 hour	73 (57.9)	120 (58.5)	80 (49.1)	37 (64.9)	0.094
1-3 hours	26 (20.6)	44 (21.5)	49 (30.1)	7 (12.3)	
3-6 hours	8 (6.3)	16 (7.8)	15 (9.2)	3 (5.3)	
6-12 hours	8 (6.3)	9 (4.4)	3 (1.8)	6 (10.5)	
>12 hours	11 (8.7)	16 (7.8)	16 (9.8)	4 (7.0)	
Main clinical presentation					
Falls	91 (65.0)	154 (67.2)	118 (69.8)	42 (73.7)	0.414
Poisoning - drugs	7 (5.0)	3 (1.3)	6 (3.6)	1 (1.8)	
Poisoning - other	2 (1.4)	0 (0.0)	2 (1.2)	0 (0.0)	
Ingestion of corrosives	2 (1.4)	2 (0.9)	4 (2.4)	0 (0.0)	
Respiratory foreign body	1 (0.7)	1 (0.4)	3 (1.8)	0 (0.0)	
Esophageal foreign body	0 (0.0)	2 (0.9)	0 (0.0)	0 (0.0)	
Gastrointestinal foreign body	2 (1.4)	5 (2.2)	0 (0.0)	1 (1.8)	
Penetrating stab injury	11 (7.9)	27 (11.8)	14 (8.3)	3 (5.3)	
Others	24 (17.1)	35 (15.3)	22 (13.0)	10 (17.5)	
Type of poisoning					
Suicidal	6 (54.5)	2 (40.0)	3 (30.0)	0 (0.0)	0.712
Accidental	5 (45.5)	3 (60.0)	7 (70.0)	1 (100.0)	
Triage level					
Green	2 (1.4)	4 (1.8)	2 (1.2)	0 (0.0)	0.281
Yellow (Emergency)	137 (98.6)	219 (96.1)	165 (98.8)	56 (98.2)	
Red (Urgency)	0 (0.0)	5 (2.2)	0 (0.0)	1 (1.8)	

[†] Data shown as n (%) or median [min-max].
EMS: emergency medical services

Table 4. Distribution of application complaints in both years by age groups.

Main clinical presentation†	≤ 5 years	> 5 years	*p*
2019 *(n=700)*	*(n=502)*	*(n=198)*	
Falls	335 (66.9)*	87 (43.9)*	
Poisoning - drugs	19 (3.8)*	15 (7.6)*	
Poisoning - others	2 (0.4)	1 (0.5)	
Ingestion of corrosives	7 (1.4)	0 (0)	
Respiratory foreign body	2 (0.4)	0 (0)	**<0.001**
Esophageal foreign body	0 (0)*	2 (1)*	
Gastrointestinal foreign body	13 (2.6)	9 (4.5)	
Penetrating stab injury	14 (2.8)*	21 (10.6)*	
Others	109 (21.8)*	63 (31.8)*	
2020 *(n=597)*	*(n=417)*	*(n=180)*	
Falls	310 (74.3)*	96 (53.3)*	
Poisoning - drugs	8 (1.9)*	9 (5)*	
Poisoning - others	2 (0.5)	2 (1.1)	
Ingestion of corrosives	6 (1.4)	2 (1.1)	
Respiratory foreign body	5 (1.2)	0 (0)	**<0.001**
Esophageal foreign body	2 (0.5)	0 (0)	
Gastrointestinal foreign body	6 (1.4)	2 (1.1)	
Penetrating stab injury	16 (3.8)*	39 (21.7)*	
Others	62 (14.9)	30 (16.7)	

† Data shown as n (%).
* Significant difference between the subgroups.

DISCUSSION

Since respiratory droplets have been reported to be the transmission route for the disease caused by SARS-CoV-2 (Covid-19), which started at the end of 2019 and spread all over the world in a short period, several restrictive measures have been taken to prevent crowding and the spread of the disease in communities. The lockdown measures initiated to mitigate viral spread have led to more time spent indoors and in households. In this period of uncertainties, changes were introduced in the delivery of emergency healthcare services. With the decrease in the number of individuals circulating in the community, compliance with masks, distance, and hygiene rules, a significant decrease was observed in the applications related to upper respiratory tract infection, bronchiolitis, and pneumonia, which we frequently see in this season. Likewise, children staying at home decreased the number of children on the road and showed a reduction in the number of cases such as traffic accidents and bicycle accidents. In this context, we analyzed the impact of the "stay at home" orders concerning the admissions to PEDs due to home accidents. Our study indicated that the number of patients presented to our PED due to home accidents during the pandemic (March – June 2020) was lower than that in 2019. However, one-fourth of all admissions to the PED were due to home accidents in 2020, while only one-tenth of all entries were due to home accidents in 2019. In addition, the girls/boys ratios were similar; the patients in 2020 benefited more from emergency services; falls, foreign bodies in the stomach/intestines, penetrating stab injuries, and cuts were more common in 2020; and there were differences between these periods regarding the diagnostic and the therapeutic procedures. It was also found that the proportion of hospitalized patients was higher in 2020, and these patients were less frequently discharged from the emergency room.

HAs are the leading preventable accidents in Turkey and the world (7,8). They are frequently seen in preschool, leading to disabilities or even death. According to the WHO data, burns, falls, and poisoning are the most common accidents in children younger than 15, forming one of the most significant health problems. Previous studies have reported that 18-40% of all accidents in Turkey were home accidents (9,10). There is a great deal of responsibility for those who care for children in preventing HAs. Lack of knowledge, negligence, or recklessness is the leading cause of such accidents. Since preschool-age groups spend more time at home, home environments should be safer for this age group. For example, to use bed borders to prevent the child from falling from the bed, keep materials such as drugs and detergents out of the child's reach to avoid poisoning, or choose toys suitable for the child's age to prevent foreign body aspiration. Many factors (such as building, furniture, or toy safety) contribute to the development of HAs. However, the contribution of the pandemic we are into HAs is not known yet. Several studies have demonstrated that the type of HAs varied by age. Falls and crashes are the most common types of home accidents and are more frequent in children under five (11,12-17). Falls constitute approximately 30% of trauma admissions and 15% of PED admissions 13 and are especially common in boys and children under five (18,19-22).

Foreign bodies in the esophagus and other parts of the gastrointestinal system are frequent in children between six months and three years. Mortality due to foreign body ingestion is very low (23-27). In our study, falls were the most common reason for emergency room admissions in 2019 and 2020. In our research, falls were more common in children aged five or younger. Falls, foreign bodies in the stomach/intestines, and penetrating stab injuries were more common in 2020 than in 2019. The number of admissions to the emergency room was highest in April. Falls were the most common reason for visiting the emergency room in all months of the studied period. A previous study has shown that falls were the most common complaint in all months (28).

Studies have shown that boys are more prone to accidents because they are more active and adventurous than girls (29-31). On the contrary, our study indicated that girls and boys involved in home accidents were comparable. However, more girls were presented between May 1 and June 10, 2020, and the proportion of girls who contributed to the PED increased almost two-fold during the study. When the application complaints during these periods are evaluated, it is seen that falls are the most common complaints in all months. Although the reason for this increase in girls has not been determined precisely, the length of stay at home has made the effects of risky situations that may cause home accidents equal for both sexes on children.

It was interesting that the number of visits for PED was highest between 16:00 and 24:00. With the "stay at home" orders, many institutions implemented flexible or remote working; therefore, a significant portion of the caregivers spent more time at home with their children. It was surprising that the visits to the emergency room were often during these hours.

The recovery rates or sequelae after HAs have been reported between 7.8% and 18%. Mortality rates were reported to be between 0% and 2% (15, 31, 32). In our study, approximately 90% of the cases in 2019 and about 85% of the patients in 2020 were discharged from the PED without any sequelae. However, it was found that the cases in 2020 required more hospitalization and intensive care compared to the previous year. However, this was thought to result from the late admission of these cases or more severe type of accidents and injuries. When all patients were considered, most cases were presented to the PED within the first three hours of the accident. The fact that the use of resources for ESI is higher in patients who applied in 2020 suggests that the severity of the disease is higher in patients who apply and that more follow-up is required.

Of three patients, who received intensive care, two had ingested button batteries; one of the patients (10 months old) had melena for three days; the other two patients were presented to the hospital within three hours of ingesting drugs. The length of hospital stay was similar in both years.

CONCLUSION

Our study is the first to reveal the impact of PED in home accidents involving children during the "stay at home" period because of the global epidemic. The pandemic increased the proportion of home accidents in all admissions to the emergency room. The most common type of accident was falls, as in the previous periods. The pandemic caused delays in accessing health services, especially in critical patients, more hospitalizations for treatment, and a decreased discharge rate from the emergency department.

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

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