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Original Article

Investigation of Patients Refusing Treatment in the Pediatric Emergency Service During the COVID-19 Pandemic

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ABSTRACT

Objective: Emergency departments are becoming increasingly crowded. Analyzing patients who refuse treatment in the emergency department is crucial to improve the quality of care and reduce overcrowding. This study determined why some parents who presented to the pediatric emergency department during the coronavirus disease-2019 (COVID-19) pandemic refused treatment for their children.

Materials and Methods: The study was conducted at the Kartal Dr. Lütfi Kırdar City Hospital, Pediatric Emergency Clinic. Patients who presented to the pediatric emergency department between November 1, 2021 and December 31, 2021 and whose parents refused treatment were analyzed retrospectively via telephone interviews. Demographic characteristics, diagnosis, and reasons for refusal to treatment were analyzed.

Results: Over the 2-month period, parents of 154 (0.3%) of 51.111 patients who presented to the pediatric emergency department refused treatment. Parents refused treatment for the following reasons: 68 (44%) parents refused treatment because the patient felt well, 36 (23%) wanted to continue treatment at home, and 18 (11%) wanted to avoid hospitalization. Of the patients who refused treatment, 16 (10%) returned to the pediatric emergency department within 72 h with the same symptoms, and 5 of them were hospitalized.

Conclusion: The COVID-19 pandemic has increased patients' refusal to treatment because of the fear of infection. The inappropriate use of emergency services, which leaves physicians with insufficient time to explain medical examinations and treatments to the family members of patients in a clear and understandable language, as well as the patients' right to re-present to hospitals after refusing treatment, are the main reasons. Actions should be taken to improve working conditions, increase satisfaction of healthcare professionals, raise awareness among patients and their family members and reduce overcrowding at emergency departments. These actions can prevent treatment refusal, even during the COVID-19 pandemic.

Keywords: Emergency department, COVID-19, pediatric patients, refusal of treatment

INTRODUCTION

Patient density in emergency services is increasing daily.[1] Inappropriate applications to the emergency services increase patient density and prevent those who genuinely require emergency health care from benefiting from the service.[2] Reduction in patient density, identification of the reasons for admission, raising awareness of patients regarding unnecessary applications, use of resources efficiently, and improvements in service qualityare extremely important factors for emergency service providers and real emergency patients. Therefore, it is important to examine patients who refuse treatment in the emergency department to address these problems.

The right to refuse treatment is based on the principle of respect autonomy. However, autonomyis the ability to make decisions independently of another person or situation, and to act based on these decisions.[3,4] However, as children are not the ability to make

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decisions independently, they cannot provide informed consent or refuse treatment. Parents or legal guardians have the right to refuse medical treatment on behalf of their children.[5]

Parents of patients admitted to the pediatric emergency department may have various reasons to refuse medical treatment. The refusal of treatment may occur due to the characteristics of the health institution, the health system, the quality of health services, communication between the patient and the physician, financial problems, fears about interventions, educational status of the families, the patient feeling well, and the desire to continue treatment at home.[6,7] Physicians must inform patients and their relatives regarding the problems and consequences that may arise after exercising their right to refuse treatment.

This study aimed to determine the reasons for parents refusing treatment for their children to provide better quality service, increase patient satisfaction, use existing resources efficiently, eliminate deficiencies, and solve existing problems.

MATERIALS AND METHODS

This single-center retrospective cross-sectional descriptive study was conducted in the Pediatric Emergency Clinic of Kartal Dr. Lütfi Kırdar City Hospital. Patients who applied to the pediatric emergency department between 01 November and December 31, 2021, and whose parents refused treatment were retrospectively analyzed. Age, sex, diagnosis, triage codes, average length of hospital stay, reasons for refusing treatment, re-admissions to the hospital after refusing treatment were analyzed in patients who signed the “medical treatment refusal form” using electronic data and via telephonic interviews. Pediatric patients aged 0-18 years and whose information was fully accessible were included in the study. Patients with missing information were excluded from the study. The necessary administrative permissions and ethical approvals were obtained from the relevant authorities.

SPSS ver. 18.0 for Windows (SPSS Inc.; Chicago, IL, USA) program was used for statistical analysis of data. Descriptive statistics were examined and qualitative data are presented as numbers and percentages.

RESULTS

Parents of 154 (0.3%) children among the 51,111 patients who applied to the pediatric emergency department in the two-month study period refused treatment. Of these patients, 76 (49%) were female and 78 (51%) were male. Furthermore, 8 were newborn, 8 were aged 1-3 months, 57 were aged 3-36 months, 31 were aged 3-6 years, and 50 were aged 6-18 years. The triage code of all patients included in the study was yellow. The mean length of hospital stay was 4 years.

Diagnoses of the patients who were refused treatment included lower respiratory tract infection [(LRTI); n=48], intoxication (n=20), coronavirus disease-19 [(COVID-19); n=19], seizures (n=13), acute gastroenteritis (n=11), upper respiratory tract infection (n=8), and others (aspiration, dizziness, preseptal cellulitis, and urinary tract infection, among others) (n=35). The distribution of the diagnoses is presented in Figure 1.

Treatment was refused based on the following reasons: the patient was feeling well (44%; n=68; 25% of these patients were diagnosed withintoxication), desire to continue treatment at home (23%; n=36; 69% of these patients had LRTI), desire to not be hospitalized (11%; n=18), desire to visit another hospital (11%; n=17; 2 patients due to lack of an endoscopy device and 2 patients to get a second opinion), prolonged treatment (n=6), fear of interventions (n=3), and other reasons (n=6; getting ready for hospitalization and waiting for COVID-19 test result at home, among others) (Figure 2).

Of the patients who refused treatment, 14 (9%) were re-admitted to our hospital for follow-up examination and 66 (42%) were re-admitted owingto other health problems. Although 16 (10%) patients applied to the pediatric emergency service again within 72 h with the same complaints, 5 of these patients were hospitalized. Seven of the re-admitted patients were diagnosed with LRTI and four revisited the hospital for a follow-up examination. Three patients applied to the hospital were owing to increased respiratory distress and one of them was hospitalized. One patient who refused treatment had a febrile convulsion and was re-admitted to the hospital. Of the five patients who were hospitalized after re-admission, one patient-refused treatment to wait for COVID-19 test results at home, and one patient left the hospital to prepare for hospitalization before applying later for hospitalization. Three patients were hospitalized as their conditions worsened.

DISCUSSION

Parents may have several reasons for refusing medical treatment for their children in the pediatric emergency department. This study aimed to determine the reasons for refusing treatment of pediatric patients. During the study period, parents of 154 (0.3%) pediatric patients refused treatment. Similar results were obtained in previous studies conducted in Turkey.[8-10]

In this study, none of the parents refused treatment owingto financial reasons. However, in most studies conducted in other countries, financial reasons take the first place among reasons for refusing treatment.[11,12] Previous studies conducted in Turkey show that although financial reasons have never been one of the most common reasons for refusing treatment, the rates were considerably high in the past and have been decreasing steadily.[9,13] This is attributable to the changes and innovations in the health system in Turkey and the increase in the population with health insurance.

The two most important reasons for refusing treatment in this study were patient feeling well after the examination and wanting to continue the treatment at home. The diagnosis of most of the patients who felt well after the examination was intoxication. The most common cause of intoxication in children is medications. Although most cases of drug intoxication are associated with

suicidal purposes in adults, the most common cause in children is accidental ingestion.[14] Parents often do not know whether their children have ingested the toxic substance and apply to the emergency department due to suspicions regarding the same. The fact that the observation period issued by the 114 intoxication control centers in Turkey is too long in most patients can be considered a factor for refusing treatment.

The diagnosis of those who wished to continue the treatment at home was predominantly LRTI. LRTIare a common disease of childhood worldwide. In developing or underdeveloped countries, it is among the causes of mortality in children under the age of 5.[15] Recurrent LRTI is considered more than one attack of bronchitis, bronchiolitis, or pneumonia within 6 months or 3 or more attacks within 1 year.[16] Most of the patients with a diagnosis of LRTI who refused treatment had recurrent LRTI and were experienced patients with home nebulizers.

In this study, 18 (11%) patients refused treatment because they did not want to be hospitalized. COVID-19 pandemic was a serious threat to the time of the study, and some parents stated that the reason for not wanting hospitalization was the fear of contagion. After the onset of the pandemic, there has been a decrease in the number of emergency room patients in several countries. It has been reported that the number of emergency department admissions decreased by 30-40% in China.[17] In Turkey, the number of emergency department admissions also decreased. reportedly, social isolation, thereby a decrease in the spread of infectious factors, postponing the follow-up of chronic diseases, and fear of COVID-19 contamination was effective in decreasing

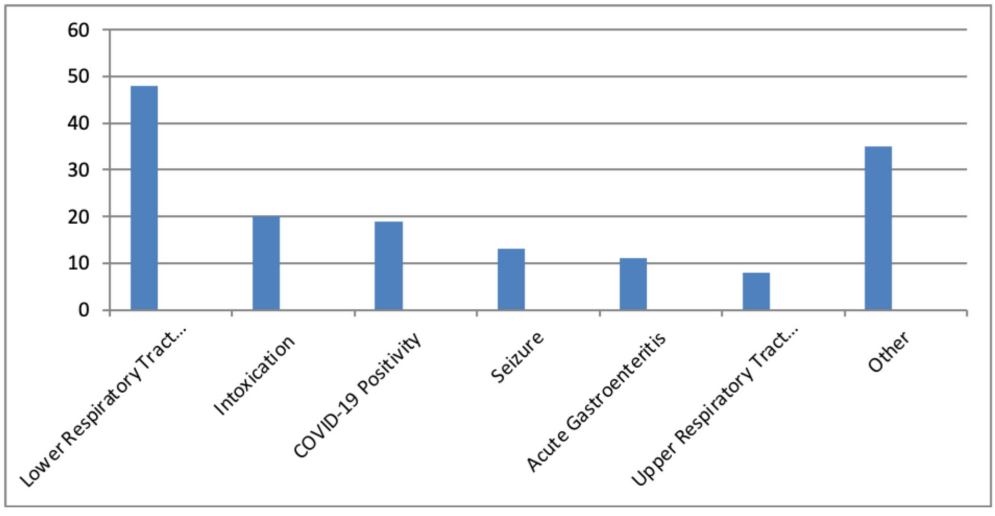

Figure 1. Distribution of diagnoses

COVID-19: Coronavirus disease-2019

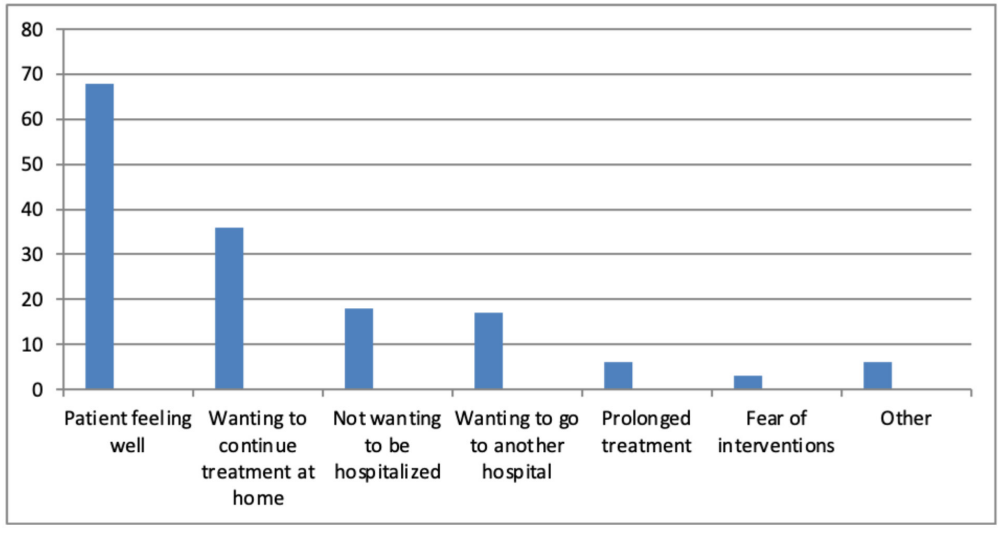

Figure 2. Reasons for parents for refusing treatment

hospital admissions.[18] COVID-19 also affected parents in terms of hospitalization.

Frequent use of emergency services by non-emergency patients creates significant problems for both patients and service providers. Inappropriate use of emergency services is defined as "the use of emergency services for health problems that develop without accident or injury, do not require special emergency services, and can be safely treated in primary healthcare institutions".[19-21] Such inappropriate use of emergency services increases patient density. However, efficient use of resources is extremely important. By reducing the patient density in the emergency services, physicians can spend more time with patient relatives and explain the examination and treatment processes in a way they can understand. Working conditions should be continuously improved and the satisfaction of healthcare workers should be increased. The refusal of treatment can be prevented by a holistic approach checking all of these boxes. This in turn prevents the waste of both labor and other resources.

Study Limitations

The limitations of the study; the demographic and socio-economic characteristics of parents who refused treatment due it being a retrospective study are unknown.

CONCLUSION

In conclusion, the physicians need to assign enough time to explaining the examination and treatment to the patient's relatives in a way they can understand to prevent treatment refusal. To achieve this, patient density in emergency services should be reduced, and the awareness of the patients and their relatives should be increased. The presence of primary healthcare services that patients can use outside working hours is also extremely important in reducing the patient density in emergency services.

Ethics

Ethics Committee Approval: Ethical approval was obtained from Kartal Dr. Lütfi Kırdar City Hospital Clinical Research Ethics Committee (date: 30.03.2022, approval no: 2022/514/222/5).

Informed Consent: Retrospective study.

Peer-reviewed: Externally peer-reviewed.

Authorship Contributions

Surgical and Medical Practices: N.C., F.H.E., Y.A., Concept: N.C., F.H.E., Y.A., Design: N.C., F.H.E., Y.A., Data Collection or Processing: N.C., F.H.E., Y.A., Analysis or Interpretation: N.C., F.H.E., Y.A., Literature Search: N.C., F.H.E., Y.A., Writing: N.C., F.H.E., Y.A.

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