

Factors Affecting Satisfaction of Parents at Pediatric Emergency Department Admission

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Abstract

Aim: The purpose of this study is; to reveal the demographic characteristics of the patients, to assess parental satisfaction and to establish the factors that affect parental satisfaction, and the reasons for which parents are satisfied or dissatisfied.

Material & Methods: A total of 186 patients who were admitted to Düzce University Hospital Pediatric Emergency Department between February 1st 2017 - April 1st 2017, and accepted to fill out the questionnaire were taken to the study.

Results: During the period of the study, 6110 patients were admitted to a pediatric emergency department. 186 patients were taken to the study. 42.5% (n=79) were male and 56.5% (n=105) were female and 12.8% (n=22) were in the neonatal period and 16.8% (n=31) were below 1 year of age, 47.3% (n=87) were between 1 and 6 years of age, 18.5% (n=34) were between 7 and 12 years of age and 5.4% (n=10) of the patients were observed between 13 and 18 years of age. 79% (n=147) were satisfied, 18% (n=35) were slightly satisfied and 2.1% (n=7) were not satisfied, when the general satisfaction of the parents with the pediatric emergency department was questioned. A statistically significant relationship was found between the parents' general satisfaction and recommending to their relatives preferring to the pediatric emergency department. 86.4% of the parents (n=159) stated that they would prefer the pediatric emergency department again.

Conclusions: The pediatric emergency department provides continuous 24-hour service for the patients, and adherence to therapy depends on confidence from satisfaction. Level of physician's medical knowledge, behaviors of healthcare staff, waiting time before the examination, access to the healthcare staff when needed, and satisfaction levels of the resulting time of laboratory and radiology surveys are important factors that affecting general satisfaction of the parents.

Keywords: Pediatric Emergency Department, Parental Satisfaction, Standby time, Doctor Medical Information

INTRODUCTION

Emergency departments are different from other departments of the hospital. Even if all the beds are full, the patient can not be rejected from the emergency department and the diagnosis and treatment of the emergency patients should be done quickly. Patient satisfaction depends on; past experiences, future

expectations, individual and social values and lifestyle (1). Emergency departments are open to the outside of the hospital, which can be accessed daily and 24 hours a day. Therefore, the separation of the patients to the emergency care service will contribute to the patient's preference for the same hospital in the future. At the same time it is known that the level of satisfaction increases the compliance with the

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proposed treatment and facilitates healing (2). One of World Health Organization (WHO) that has six health system building blocks is the provision of effective, safe and good quality health care services for those in need (3). Previous data indicated that patient satisfaction is more influenced by sociocultural, psychosocial and disease-related characteristics of the patient than by objective quality of care indicators (4). It has been reported that the most effective factor affecting patient satisfaction is the relationship between health service providers and patients (3). The purpose of this study is; To reveal the demographic characteristics of the patients who are referred to the Düzce University Hospital Pediatric Emergency Department, to evaluate the parental satisfaction and to determine the factors affecting the parent satisfaction and the reasons why the parents are satisfied and dissatisfied.

MATERIAL AND METHODS

Between February 1, 2017 and April 1, 2017, a total of 186 patients who were accepted to fill out the questionnaire to Düzce University Hospital Pediatric Emergency Department were taken to the study. For inclusion criteria; the parents of the patients referred to the pediatric emergency department were taken. Factors affecting the satisfaction of the parents of the pediatric emergency department and sociodemographic characteristics were investigated. The questionnaires were not made by the service providers, and after the patients' examination procedures were completed, our intern doctors interviewed the patients face to face. Patient relatives were informed before the questionnaire, and approval for the questionnaire was obtained. Ethics committee approval for research was obtained from Düzce University Clinical Research Ethics Committee.

STATISTICAL ANALYSIS

The SPSS 13.0 (Statistical Package for Social Sciences for Windows) package program was used for statistical analysis. Descriptive statistics and frequency distributions were calculated in accordance with the characteristics of the variables included in the study. Pearson chi-square and Fisher's exact chi-square tests were used to compare the categorical variables.

RESULTS

A total of 6110 patients were enrolled in the Pediatric Emergency Department between February 1 and April 1, 2017, during the period of the study. The study enrolled 186 patients. Of the patients, 42.5% (n = 79) were males and 56.5% (n = 105) were females. Of the patients, 12% (n = 22) were in the neonatal period, 16.8% (n = 31) were under 1 year, 47.3% (n = 87) were

between 1 and 6 years of age, 18.5% (n = 34) were between 7 and 12 years of age and 5.4% (n = 10) were between 13 and 18 years of age. We found that 94.9% (n = 167) of married and 5.1% (n = 9) of the parents of the pediatric emergency patients were divorced. Considering the educational status, we found that 3.3% (n = 6) of the mothers were not literate, 1.1% (n = 2) were literate and 50% (n = 90) were primary or junior high school graduates, 33% (n = 60) were high school graduates and 12.6% (n = 23) were university graduates. We found that 37.7% (n = 69) of the fathers were primary or secondary school graduates, 44.8% (n = 82) were high school graduates and 16.9% (n = 31) were university graduates (Table 1).

Table 1. Demographic characteristics of parents of patients

Variable	n	%
Gender		
Male	79	42,5
Woman	105	56,5
Age group		
Newborn	22	12
<1 year	31	16,8
1-6 year	87	47,3
7-12 year	34	18,5
13-18 year	10	5,43
Mother and father		
The married	167	94,9
Divorced	9	5,11
Educational status of mothers		
Not literate	6	3,3
Literate	2	1,1
Primary / Secondary School	91	50
High school	60	33
University	23	12,6
Educational status of fathers		
Not literate	0	0
Literate	1	0,55
Primary / Secondary School	69	37,7
High school	82	44,8
University	31	16,9

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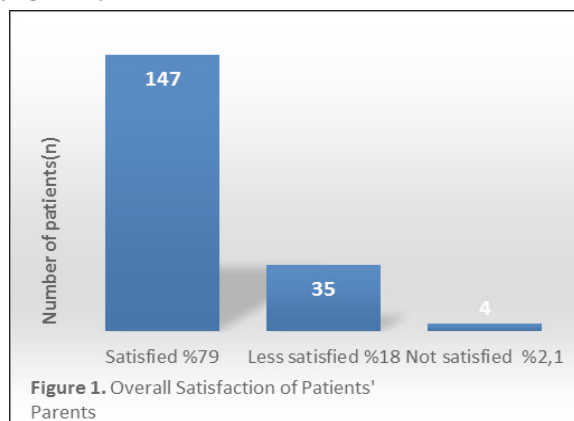
We were observed that 74.2% (n = 138) of the patients enrolled to the study were within the working hours and 25.3% (n = 47) of the emergency services were outside the working hours. The 61.8% (n = 115) of the pediatric emergency department patients applied to hospital with private vehicles, 33.3% (n = 62) with public transport and 3,7% (n = 7) by ambulances. We found that 74.3% (n = 130) waited less than 15 minutes, 14.9% (n = 26) waited between 15 and 30 minutes, 7.4% (n = 13) 30 minutes and 1 hour and 3.4% (n = 6) waited between 1 and 2 hours. Other variables related to the general characteristics of the patients were shown in Table 2.

Table 2. General characteristics of the parents of the patients

Variable		n	%
Emergency arrival time			
	During working hours	138	74,2
	Out of working hours	47	25,3
Emergency service admission form			
	His/Her self	151	81,2
	Patient referral	4	2,15
	The clinic	30	16,1
Transport to emergency service			
	Public transport	62	33,3
	Private vehicle	115	61,8
	Ambulance	7	3,76
Reason for waiting in emergency service			
	Standby	21	11,3
	Examination	25	13,4
	Treatment	115	61,8
	Hospitalization	16	8,6
	Others	8	4,3
Waiting time for emergency care in patients under observation treatment			

	<30 minute	65	34,9
	30 minute-1 hours	13	6,99
	1-2 hours	12	6,45
	>2 hours	40	21,5
Waiting period before emergency service inspection			
	<15 minute	130	74,3
	15-30 minute	26	14,9
	30 minute-1 hours	13	7,43
	1-2 hours	6	3,43
Total waiting time in emergency service			
	<30 minute	54	29
	30 minute-1 hours	21	11,3
	1-2 hours	25	13,4
	2-6 hours	36	19,4
	6-24 hours	17	9,14
	>24 hours	10	5,38

We observed that 79% (n = 147) were satisfied, 18% (n = 35) were less satisfied and 2.1% (n = 7) were not satisfied when the patients' general satisfaction with the pediatric emergency department was questioned (Figure 1).



When the patients' satisfaction with the medical knowledge and behavior of the doctors and nurses in the pediatric emergency department were compared with the general satisfaction, we found that there was a statistically significant increase in general patient

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satisfaction level as the doctor's medical knowledge and satisfaction with the nurse's behavior increased (Table 3, Table 4). We observed that the patient's satisfaction with the emergency waiting time and the satisfaction of accessing to the health care personnel in case of need were statistically significant on the overall satisfaction (Table 5, Table 6). We found that the effect of patients on overall satisfaction with the end of the laboratory and radiological examinations was statistically significant. The other parameters of satisfaction of the parents of the patients and the level of satisfaction were given in Table 7.

Table 3. Parents' general satisfaction with medical knowledge of their doctors

General satisfaction	Level of satisfaction with doctor's behavior							
	Yes		Less		No		Total	
	n	%	n	%	n	%	n	%
Yes	146	78	1	0,5	0	0	147	79,0
Less	26	14	7	3,8	2	1,1	35	18,8
No	4	2,2	0	0	0	0	4	2,2
Total	176	95	8	4,3	2	1,1	186	100

Table 4. Relationship between the behavior of the nurses and the parent's overall satisfaction

General satisfaction	Level of satisfaction with nurse behavior							
	Yes		Less		No		Total	
	n	%	n	%	n	%	n	%
Yes	145	78	2	1,1	0	0	147	79
Less	25	13	7	3,8	3	1,6	35	18,8
No	4	2,2	0	0	0	0	4	2,15
Total	174	94	9	4,8	3	1,6	186	100

Table 5. Relationship between parental satisfaction and emergency waiting period

General satisfaction	Level of satisfaction with the waiting period							
	Yes		Less		No		Total	
	n	%	n	%	n	%	n	%
Yes	129	69	14	7,53	3	1,6	146	78
Less	21	11	7	3,76	8	4,3	36	19
No	2	1,1	2	1,08	0	0	4	2,2
Total	152	82	23	12,4	11	5,9	186	100

Table 6. Relationship between access to healthcare personnel in case of need and parental satisfaction

General satisfaction	Level of satisfaction with reaching healthcare personnel							
	Yes		Less		No		Total	
	n	%	n	%	n	%	n	%
Yes	128	68,8	19	10	2	1,1	149	80
Less	24	12,9	6	3,2	5	2,7	35	19
No	2	1,08	0	0	0	0	2	1,1
Total	154	82,8	25	13	7	3,8	186	100

Table 7. Variables related to parental satisfaction

Parameters		n	%
Reception, counseling and referral services were generally good.	Yes	151	81,2
	Less	24	12,9
	No	11	5,91
The waiting rooms were relaxed.	Yes	104	56,2
	Less	50	27
	No	31	16,8
I was pleased with the timing of the lab tests.	Yes	128	72,7
	Less	30	17
	No	18	10,2
I was satisfied with the timing of the radiology examinations.	Yes	131	78,4
	Less	22	13,2
	No	14	8,38
Emergency service workers took care of our personal privacy.	Yes	157	87,2
	Less	20	11,1
	No	3	1,67
Emergency service was clean.	Yes	115	62,2
	Less	51	27,6
	No	19	10,3
The conditions of the emergency room were good.	Yes	107	57,5
	Less	56	30,1
	No	23	12,4

A statistically significant relationship was found between the parents' preferences for visiting or recommending the pediatric emergency department to their relatives and their general satisfaction. 86.4% of the families (n = 159) stated that they would prefer the pediatric emergency department again in the future (Figure 2).

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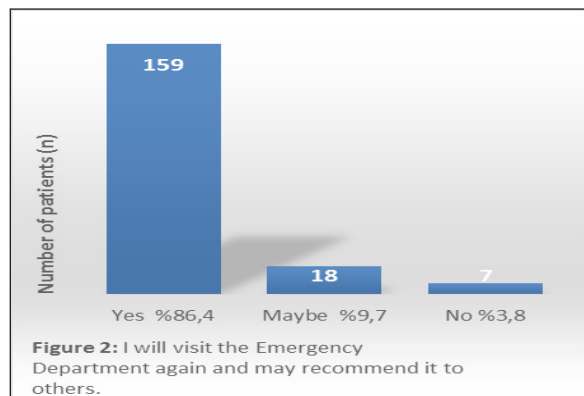


Figure 2. *I will visit the Emergency Department again and may recommend it to others.*

DISCUSSION

The quality perceived by the parents in the Pediatric Emergency Department and satisfaction as a function of the expected quality occurs. Before parents receive service there are certain expectations and certain perceptions are formed after service presentation. Parents determine whether it is satisfied as a result of the comparison between the quality it perceives and the quality it expects (5). The most important factors in satisfaction can be summarized as information, orientation, speed of service, interest and kindness, empathy, psychosocial support, competence of service providers, appropriateness of timeliness of medical tests and overall quality (6).

Many studies on patient satisfaction have been made in our country, and according to these studies we have a sample volume in the middle order. The 135 patients in Marmara University Hospital in 2008 and 117 patients in another study conducted by Ozcan et al. in Silvan State Hospital in 2008, 473 patients in a study of Apay et al. 180 patients who were referred to the Emergency Department of the Faculty of Medicine of Afyon Kocatepe University by Oruç et al. were evaluated in 2014 (7-9,2). In our study, 186 patients were enrolled. However, the number of studies on parental satisfaction in the pediatric emergency department is low, and when the factors affecting parental satisfaction in pediatric emergency services will become clearer.

When we look at the overall satisfaction rates, the level of patient satisfaction in a study conducted in 2012 in Ethiopia was 86.7%, in Saudi Arabia in a study conducted in 2011, 70.4%, Akkaya et al. in the study

conducted by Uludağ University Hospital in 2008, 93.3% and Aşlıoğlu et al. In the Ondokuz Mayıs University Hospital in 2008, it was seen as 74.6% in the study about the level of parental satisfaction in the pediatric emergency department (1,3,4,10). In our study, it was determined that a great majority of parents (97% satisfied, 18% less satisfied) were satisfied with the pediatric emergency department when their general satisfaction levels were questioned during their stay in the pediatric emergency department. The high level of satisfaction in our work and in other studies conducted in our country indicated that the quality of the patient health care is better in our country.

Waiting time is an important component of patient satisfaction (4). In a study conducted in our country, pre-examination waiting times were 74.8 minutes, 51.1 minutes, and 129.7 minutes (1). In our study, 74.3% (n = 130) of the patients were waiting less than 15 minutes before examination, satisfaction level with respect to waiting times was 94.4% (n = 175), it was seen that satisfaction with statistical latency was significant on parents' overall satisfaction. The waiting period in our study was observed to be less than the other three studies in our country.

As a result of our research we determined that behavior and medical knowledge and behavior of doctors and nurses in pediatric emergency department, access to healthcare staff when needed, and of obtaining early the results of laboratory and radiology tests affect parents' overall satisfaction. The most important reasons for the dissatisfaction of the patients in the emergency department are the inappropriate attitude and clothing of the physician, the lack of knowledge on them, the inadequate communication skills, the negativity of the physical environment of the emergency department and the long waiting periods. Nurses also need to have good communication with the patient because the nurse's attitudes and behaviors are also a factor that has a significant effect on the overall satisfaction of patients (1). In our study, we found that parents' satisfaction level of emergency nurses was 94%, and the effect of nursing behavior, medical care and experience on overall satisfaction was statistically significant. Waiting long periods in laboratory, imaging and other ancillary services increase the length of stay in patients' emergency services, leading to dissatisfaction for parents. It has been reported that

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the use of technologies that accelerated laboratory services in Konca and Ceyhan's work shortened the waiting time of patients in emergency services (1,11). In our study, the satisfaction of the patients with respect to the duration of the end of the laboratory and radiological examinations was found to be influential on the parents' overall satisfaction. The dissatisfaction of parents increased as the duration of the expiration of the investigations were prolonged.

It is stated in the literature that patients usually apply to the emergency unit because they perceive their situation as urgent or because the emergency unit is close to home, to a shorter time for examination, not to find a place in the related polyclinics or to make a prescription printing and parenteral application or not to receive care from other hospital units (6). In our study, when the education levels of the parents who applied for emergency services, it was found that 50% of mothers (n = 91) were primary school or junior high school graduates and 33% (n = 60) were high school graduates, of the fathers 37,7% (n = 69) were elementary or junior high school graduates and 44,8% (n = 82) were high school graduates. We observed that the education level of the patients who preferred the emergency department in our study was low and medium level and we observed that people with high education level did not unnecessarily occupy the emergency department.

When looking at the preference for emergency department, Topuz and his colleagues determined that 41.4% of the patients who applied in their studies would prefer again and that the Preference and friends preferred 70.7% (12,13). In our study, we observed that 86.4% (n = 159) of the parents would prefer the pediatric emergency department again and recommend it to their relatives.

An important issue to be aware of, the satisfaction of the parents of the patients provides the trust in the service first. Studies show that trust is an indispensable element in establishing a therapeutic relationship and has a significant effect on compliance with care (14).

CONCLUSIONS

The pediatric emergency department provides continuous 24-hour service for the patients who were admitted, and the compliance of the treatment

depends on the confidence from the satisfaction. The physician's medical knowledge, the behavior of the nurse, the waiting period before the emergency care visit, the access to the healthcare staff if necessary, and the satisfaction level of the laboratory and radiology examinations are important factors affecting the overall satisfaction of the parents. When all these results were evaluated together, it should be targeted to relatively low areas of parental satisfaction and high satisfaction levels should be maintained. Hospital administrators should improve to in order to get healthcare future facilities satisfactions of parents.

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