EPEYNA

Ικανοποίηση από την υγειονομική περίθαλψη στην παιδιατρική κλινική γενικού νοσοκομείου Αττικής-Ελλάδα

Γιαννακοπούλου Παναγιώτα¹, Δρίκος Ιωάννης², Σκίτσου Αλεξάνδρα³, Μπισκανάκη Ελπινίκη⁴, Κωνσταντακοπούλου Ολυμπία⁵, Χαραλάμπους Γιώργος⁶

- 1. Νοσηλεύτρια, Παιδιατρική Κλινική ΓΝ Αττικής «Θριάσιο»
- 2. Παιδίατρος, MD, PhD, ΓΝ Αττικής «Θριάσιο»
- 3. Νομικός, PhD, Επισκέπτρια καθηγήτρια, Πανεπιστήμιο Frederick, Κύπρος
- 4. Νοσοκομειακή Φαρμακοποιός, BSc, MPharm, MSc, MPH(c), Υπεύθυνη Φαρμακευτικού Τμήματος, ΓΝ Λεβαδειάς
- 5. MSc, PhD(c), Εργαστήριο Οργάνωσης και Αξιολόγησης Υπηρεσιών Υγείας, Τμήμα Νοσηλευτικής, Εθνικό και Καποδιστριακό Πανεπιστήμιο Αθηνών (Ε.Κ.Π.Α.)
- 6. Χειρουργός, MD, PhD, Διευθυντής Τμήματος Επειγόντων Περιστατικών, ΓΝΑ «Ιπποκράτειο», Αναπληρωτής Καθηγητής, Πανεπιστήμιο Frederick, Κύπρος

DOI: 10.5281/zenodo.4062370

ΠΕΡΙΛΗΨΗ

Εισαγωγή: Κατά τις τελευταίες δεκαετίες, το ενδιαφέρον των επαγγελματιών υγείας στρέφεται ολοένα και περισσότερο στην ικανοποίηση των ασθενών από την παρεχόμενη φροντίδας υγείας.

Σκοπός: Ο σκοπός είναι να εκτιμηθεί η ικανοποίηση των γονέων με τις υπηρεσίες / συνθήκες των παιδιών που νοσηλεύονται σε ένα Γενικό Νοσοκομείο που παρέχει υπηρεσίες υγείας στο νομό Αττικής.

Μέθοδος-Δείγμα: Το δείγμα αποτελείται από 100 συνοδούς παιδιών που νοσηλεύτηκαν κατά την περίοδο Ιούνιος-Νοέμβριος 2017. Ακολουθήθηκε δειγματοληψία χωρίς πιθανότητα. Για τις ανάγκες της μελέτης χρησιμοποιήθηκε ερωτηματολόγιο με ερωτήσεις κλειστού τύπου. Για τη στατιστική ανάλυση των αποτελεσμάτων χρησιμοποιήθηκε το στατιστικό πακέτο SPSS 20.0.

Αποτελέσματα: Το μέσο ποσοστό αξιολόγησης του νοσοκομείου ήταν 8,02. Όσον αφορά στις ιατρικές υπηρεσίες (ευγένεια, προσεκτική ακρόαση, εξήγηση και ενημέρωση), οι γονείς εξέφρασαν ένα αρκετά υψηλό επίπεδο ικανοποίησης, κατά μέσο όρο 83,7%. Η μέση βαθμολογία του ιατρικού προσωπικού ήταν 3,27 (τυπική απόκλιση 0,54, διάμεσος 3,5, ελάχιστη 1,75 και μέγιστη 3,75) και η μέση βαθμολογία του νοσηλευτικού προσωπικού ήταν 3,13 (τυπική απόκλιση 0,84, διάμεσος 3, ελάχιστη 1 και μέγιστη 4). Οι συνοδοί που βίωσαν μεγάλους χρόνους αναμονής στα επείγοντα μέχρι την εξέταση, βαθμολόγησαν με χαμηλότερη βαθμολογία το νοσηλευτικό προσωπικού (p = 0,037) και το νοσοκομείο στο σύνολό του (p = 0,002). Άλλες παράμετροι που αναλύθηκαν περιελάμβαναν ταχύτητα έκδοσης εισιτηρίων, καθαριότητα δωματίου, χρόνο αναμονής για ιατρικές εξετάσεις στα επείγοντα, απομόνωση του παιδιού κατά τη διάρκεια της ιατρικής εξέτασης, ώστε να μην το βλέπουν ή το ακούν άτομα που δεν πρέπει, ευγένεια διοικητικού προσωπικού με ικανοποίηση 68%, 91%, 59%, 75%, 62% αντίστοιχα.

Συμπεράσματα: Η έρευνα απεφάνθη ότι η ικανοποίηση των υπηρεσιών νοσοκομειακής περίθαλψης ήταν ικανοποιητική, ωστόσο απαιτείται βελτίωση. Τα αποτελέσματα κατέδειξαν αδυναμίες στη μακρά αναμονή στο τμήμα των επειγόντων περιστατικών των παιδιατρικών σθενών.

ΛέξειςΚλειδιά: Παιδιατρικοί ασθενείς, νοσοκομειακές υπηρεσίες, νοσοκομειακές συνθήκες, ικανοποίηση, ποιότητα.

Υπεύθυνος αλληλογραφίας: Μπισκανάκη Ελπινίκη, elpibis@yahoo.gr

Rostrum of Asclepius® - "To Vima tou Asklipiou" Journal

Volume 19, Issue 4 (October – December 2020)

Satisfaction from health care during hospitalization in the pediatric clinic of a general hospital in Attica Greece

ORIGINAL PAPER

Giannakopoulou Panagiota¹, Drikos Ioannis², Skitsou Alexandra ³, Biskanaki Elpiniki ⁴, Konstantakopoulou Olympia⁵, Charalambous George⁶

- 1. Nurse, Pediatric Clinic, General Hospital of Attica "Thriassio"
- 2. Pediatrician, MD, PhD, General Hospital of Attica "Thriassio"
- 3. Legal, PhD, Visiting Professor, Frederick University, Cyprus
- 4. Hospital Pharmacist, BSc, MPharm, MSc in Health Management, MPHc, Head of Pharmaceutical Department, Levadia General Hospital

Σελίδα | 308

Ικανοποίηση από την υγειονομική περίθαλψη στην παιδιατρική κλινική γενικού νοσοκομείου Αττικής-Ελλάδα



- 5. MSc, PhD(c), Center for Health Services Management and Evaluation, Department of Nursing, National and Kapodistrian University of Athens
- 6. Surgeon, MD, PhD, Director of the Emergency Department, Ippokratio General Hospital of Athens, Associate Professor, Frederick University, Cyprus

DOI: 10.5281/zenodo.4062370

ABSTRACT

Introduction: Over the last few decades, the interest of healthcare professionals is increasingly centered on patient satisfaction with the healthcare provided.

Aim: The aim is to assess the parents'/guardians' satisfaction with the services/conditions of the children who have been hospitalized in a General Hospital providing health services in the prefecture of Attica.

Method-Sample: The sample consists of 100 parents/guardians of children hospitalized during the period June-November 2017. Sampling was performed randomly. For the needs of the study, a questionnaire with closed type questions was used. The statistical package SPSS 20.0 was used for the statistical analysis of the data.

Results: The average rate of hospital evaluation was 8.02. As far as the medical services were concerned (being shown kindness, being listened to carefully, being explained to and being kept informed), the parents expressed a fairly high level of satisfaction, an average of 83.7%. The mean medical staff rating score was 3.27 (standard deviation 0.54, median 3.5, minimum 1.75 and maximum 3.75) and the mean nursing staff rating score was 3.13 (standard deviation 0.84, median 3, minimum 1 and maximum 4). The parents/guardians who experienced long waiting times in the emergency department before the child was examined, rated the nursing staff with a lower score (p = 0.037) and rated the hospital as a whole with a lower score (p = 0.002). Other analyzed parameters included speed of admission, examination room cleanliness, waiting time for emergency medical examination, child's isolation during the medical examination so he/she could not be seen or heard by people, who should not have been able to do so, kindness shown by the administrative staff, with satisfaction results of 68%, 91%, 59%, 75%, 62% respectively.

Conclusions: This research has shown that, overall, satisfaction with the hospital services being provided was satisfactory, however, improvement is needed. The results showed weaknesses in the long waiting time for the medical examination in the pediatric emergency department.

Keywords: Pediatric patients, hospitalized children, hospital services, hospital conditions, satisfaction, quality.

Corresponding Author: *Biskanaki Elpiniki*, <u>elpibis@vahoo.ar</u>

INTRODUCTION

atient satisfaction is a reliable predictor for assessing health programs and healthcare conditions. The assessment of patient satisfaction is one of the most important factors that certify the quality of health services provided.¹ According to Fong et al.,² and Morrison et al.,³ for pediatric populations, parental perceptions of the children's health care are usually assessed. Although equal health care must be given to all citizens in order to ensure equality, it is important to understand that each population may have different types of satisfaction from healthcare provided. In this the way,

additional assurance be given in can appropriate standards of care in order to reduce discontent in these patient groups. Patients evaluate the care provided based on the courtesy, abilities and interest of the staff.⁴ However, pediatric patients differ significantly from adults because they have different stages of development and react differently to the disease. The illness and the admission of the child to the hospital exposes the family to anxiety and distress. Health professionals need to approach parents with sensitivity and to inform them about the care of their children.⁵ The evaluation of the quality of the health services of the hospitalized children stems from the

appraisal of the parents. Studies have shown that assessment of the staff in the pediatric department is directly related to parental assessments.⁶ Quality of communication is another important aspect of patient care and has been shown to improve patient satisfaction in health care.⁷ Communication is an important element in medical practice. Good communication can relieve parental anxiety and can respond adequately to the expectations of parental satisfaction.⁸

AIM

The present study attempts to record and evaluate the satisfaction of the parents/guardians (since it is not possible to capture the views of minors), on the quality of services provided by the pediatric clinic of Attica General Hospital to their hospitalized children.

MATERIAL AND METHOD

Design of study

This is a contemporary study that investigated the satisfaction of parents/guardians using a structured questionnaire.

Sample-Method of sampling

The sample of the study consisted of 100 first and second degree relatives with the children who were treated in the pediatric department of the General Hospital of Attica during the period June - November 2017, in a pediatric clinic. Sampling was performed randomly. The parents/guardians were approached to collect data, after which the object of the investigation was explained to them. The contact was made in the morning and in the afternoon, so that the sample was as representative as possible.

Questionnaire

To collect the data, part of a weighted questionnaire was used which had been used in a corresponding survey in the Prefecture of Larissa, while additional questions were added that investigated the satisfaction of parents during hospitalization. A pilot survey was conducted on 15 parents/guardians, who were asked for their opinion on the clarity of The answers of the questions. the respondents to the pilot research were not used in the main research that followed.

The first page of the questionnaire clarifies the purpose of the research, as well as the correct way to complete it.

The completion time of the questionnaire is 20 minutes.

Ethical issues

The research protocol of the study was approved by the Scientific Council of the hospital, by the Director of the Pediatric Clinic and by the Director of the Nursing Service. The questionnaire stated that the participation of the parents/guardians in the investigation with the completion of the questionnaire also constituted their practical

Σελίδα | 310



consent. Those accompanying pediatric patients were also informed of the anonymity of the study.

Limitations of the study

Restrictions on research include the impossibility of generalizing findings in the general population as the sample collected was confined to only one hospital but the research was also restricted because of the short research period.

STATISTICAL ANALYSIS

Categorical variables are presented as absolute (n) and relative (%) frequencies, while quantitative variables are presented as (standard deviation) or median mean range). (interguartile The normality assumption was evaluated using the Kolmogorov-Smirnov criterion (p>0.05 for all variables), histograms and normal probability plots. Bivariate analyses were conducted and included student's t-test and analysis of variance to investigate group differences within continuous variables. Correlation between continuous variables was assessed with Pearson's correlation coefficient, while Spearman's correlation coefficient was used to investigate the relationship between a continuous and a categorical variable. Also, multivariate linear regressions were performed; the results of the linear regressions are presented by using the coefficients' beta, the 95% CIs and the

<u>Τόμος 19, Τεύχος4 (Οκτώβριος - Δεκέμβριος 2020)</u> corresponding p-values. A two-sided p-value of 0.05 was considered statistically significant. The Statistical Package for Social Sciences (IBM SPSS) program, version 20.0, was used for statistical analysis.

RESULTS

Demographics and hospitalization characteristics

The study population consisted of 100 parents or relatives of 100 hospitalized children at the Pediatric Clinic of a Public General Hospital in Greece. Table 1 presents the demographic characteristics of the parents or relatives of the children and of the hospitalized children, as well as the hospitalization characteristics.

More than 1 out 5 of the participants in this study (21%) were the child's father, and 63% were the child's mother, while the remaining 16% were another of the child's relatives. The mean age of all study participants was 39 years (SD=13.5), 81% were Greeks, and 33% were high school graduates, 23% were secondary school graduates, 18% were university graduates, 11% had a MSc/PhD, 11% were primary school graduates and the remaining 4% had not finished primary school.

Fifty-six percent of the hospitalized children were boys and the median age of all children was 6 years. Fifty-six percent of the hospitalized children had been hospitalized before, while 65% had been admitted to the clinic when the hospital was on call.

Evaluation of the Emergency Department and of the administrative services

Table 2 presents parents' and relatives'responses regarding their evaluation of theEmergencyDepartment and of theadministrative services.

Almost 3 out of 5 of the study participants reported that the waiting time for their child's medical examination was long, 91.9% reported that the waiting room in the emergency room was clean and 75% reported their child had been adequately isolated during the medical examination so they could not be seen or heard people who should not be allowed to do so.

Quality of nursing and medical care during the child's admission to the hospital

Table 3 presents parents' and relatives' responses regarding their evaluation of the Quality of nursing and medical care during the child's admission to the hospital.

Concerning the care provided by the nurses during the child's stay at the pediatric clinic:

- 76% of the study participants stated that during their hospital stay, nurses never delayed in responding to their calls/requests,
- 90% reported that during their hospital stay, nurses were usually/always willing to discuss their anxieties and fears about their child's health,

- 88% reported that during their hospital stay, nurses usually/always treated them with kindness,
- 88% reported that during their hospital stay, nurses usually/always explained things to them, and
- 92.9% reported that during their hospital stay, nurses were usually/always patient with their child.
- The mean nursing staff rating score was 3.13 (SD=0.84, median=3, minimum value=1, maximum value=4).
- Concerning the care provided by the doctors during the child's stay in the pediatric clinic:
- 79% of the study participants reported that their doctors were polite to them during their hospital stay,
- 93% reported that during their hospital stay, their doctors usually/always listened to them carefully,
- 91% reported that during their hospital stay, their doctors usually/always explained things to them,
- 79.8% reported that during their hospital stay, their doctors usually/always visited them in the ward so as to inform them about their child's health, and
- 97% stated that they were informed about interventions and treatment procedures.



The mean medical staff rating score was 3.27 (SD=0.54, median=3.5, minimum value=1.75, maximum value=3.75).

Overall satisfaction with medical and nursing staff and overall hospital rating score

Table 4 presents parents' and relatives' responses regarding their overall satisfaction with the medical and nursing staff and their overall hospital rating score.

More than 4 out of 5 of the study participants (83.7%) stated that they had a good/very good opinion of the medical experience and competence, 98% stated that they got immediate help and care, during the hospital stay, for pain or fever, 75.8% stated that the nursing staffing of the clinic was not sufficient and on the other hand 69.4% stated that the medical staffing of the clinic was sufficient. Finally, the overwhelming majority of the study participants (98%) stated that upon leaving the clinic they were given written instructions for their child's aftercare.

The mean overall hospital rating score was 8.02 (SD=1.28, median=8, minimum value=0, maximum value=10).

Correlations

Table 5 presents the bivariate analysesbetweenthedemographicsandhospitalizationcharacteristicsandthemedical staff rating score, the nursing staffrating score and the overall hospital ratingscore.

<u>Τόμος 19, Τεύχος4 (Οκτώβριος - Δεκέμβριος 2020)</u> Following the bivariate analyses, multivariate linear regressions were applied; its results are presented in Table 6.

According to the results of the multivariate linear regressions:

- Parents/guardians of children with long waiting times for emergency medical examination had a lower nursing staff rating score than patients/guardians of children who did not have to wait long for emergency medical examination (p = 0.037).
- Patients/guardians of children with long waiting time for emergency medical examinations had a lower overall hospital rating score than patients/guardians of children who did not have to wait long for emergency medical examination (p = 0.002).

DISCUSSION

The findings of the study showed satisfaction with the services provided by the General Hospital.

According to the study, parents/guardians showed a high level of satisfaction, similar to that of Papagianopoulos et al¹⁰, which evaluated the satisfaction of parents in a pediatric hospital in Attica where medical services were rated on average 3.6, while nursing services were rated 3.4. Matziou et al¹¹, who found 93.9% of parents felt that their child's care at the hospital was from

good enough to excellent, came to the same conclusion. In contrast а survey by al^{12} Moumtzoglou et who analyzed satisfaction at the Panagiotis and Aglaia Kiriakou Pediatric Hospital in Athens, found only 45% of parents were satisfied with pediatric care (an average of 45 on a scale of 100) and more precisely, a very low percentage (14/100) were satisfied with information on hospital procedures, a low percentage were satisfied with the external factors (42/100) and a rather higher percentage were satisfied (61/100) with the nursing care (interest, organization, staff competency).

The parents/guardians, in the survey under discussion, expressed a high level of satisfaction with the medical services, and in particular with courtesy (78%), information (97%), attention (75%) and ability (82%), Similar results emerged from the survey by Ygge and Arnetz¹³ at the Stockholm Pediatric Hospital, with 86% being satisfied with medical care and 88% with the hospital's overall assessment.

A high percentage (98%) said that they received immediate pain relief in the short term, as opposed to the study by Mantziou et al¹¹ where only 42.72% of patients were satisfied with the pain treatment, (40.29%) were somewhat satisfied and (13.59%) were little or not satisfied. Satisfaction rates for patience (81%), kindness (76%) and abilities (76%) of Nursing staff towards parents/guardians and children were very high. Williams¹⁴, conducted a survey in the United Kingdom at Coventry and Warwickshire (UHCW), which showed 96% and 98% satisfaction rates for nurses' "kindness" and "respect" and (89%) for the "moral support" they provided.

A high percentage of parents/guardians (59%) were satisfied with their communication with Nurses stating that the nurses were always willing to discuss their concerns and fears with them, as opposed to the study by Mantzios et al.,¹¹ conducted in one pediatric hospital and one general (which also has hospital a pediatric department) which showed that parents were less pleased with the level of personal contact with health professionals or the level of personal contact of nursing staff with their child. Specifically, about half of the parents/guardians (52.42%) were not happy with their personal contact with the Nursing staff and 43.7% were not happy with their personal contact with doctors.

High (68%) satisfaction rates were good / very good for general impressions, which is in line with the study of Papagianopoulos et al¹⁰, with (49%) parents/guardians expressing absolute satisfaction with the speed of the admission procedures.



The rates for room cleanliness were very satisfactory(91%), which contradicts the study of Papagianopoulos et al.,¹⁰ which was conducted in a pediatric hospital in Attica, where the parents/guardians rated the hospital infrastructure on average 2.4 and in particular, the majority of parents/guardians (35,2%) stated that the hospital facilities/buildings were unsuitable and requiring renovation and raised this as an important factor in terms of hygiene, while 10.5% of the parents/guardians wanted the separation of sanitary facilities for the patients from those of the parents/guardians 9.8% and wanted improved hospital cleanliness. Also. in the studv of Kalogeropoulou,¹⁵ which was conducted in six general public hospitals in Attica, 84.1% of patients reported poor room cleanliness.

Of the 59% of parents/guardians who stated that the waiting time in the pediatric emergency department was high, it was obvious that their satisfaction was low and often unclear and these facts influenced their thinking about the decision-making process for developing or critical illnesses, which is in line with a study by Green et al¹⁶ conducted at the Wilmington Emergency Pediatric Hospital in Delaware USA and also, with the study by Solheim and Garratt¹⁷ in 20 pediatric hospitals in Norway, where the mean rating of satisfaction of pediatric patients with long waiting times was 2.57 (a standard deviation <u>Tόμος 19, Τεύχος4 (Οκτώβριος - Δεκέμβριος 2020)</u> of 1.14 on a scale of 1 to 5 Likert type, with "no satisfaction" to "very satisfied" answers). However, shortcomings were encountered with regard to long waiting periods for medical examinations in the emergency department; therefore, studies should be undertaken to effectively deal with long waiting times in order to improve the quality of service and healthcare.¹⁸

Conclusion

Focusing on healthcare can be the key factor for patient satisfaction. The lack of a patientcentered care system can lead to an inadequate understanding by families of the relevant diagnoses and treatment, morbidity, mortality, and thereby lead to dissatisfaction with the care provided.¹⁹ In order to provide adequate health care and to meet the standards demanded by pediatric patients and their parents/guardians, a number of limiting factors need to be removed, such as high patient volumes, delayed medical examinations and poor communication with parents/guardians all of which may affect care standards and lead to low patient satisfaction.²⁰

Consequently, management and staff initiatives should focus on improving patient satisfaction. Also, in a pediatric environment, clear explanations to parents and guardians have proven to be particularly important in improving the quality of nursing care.²¹ Satisfaction studies should aim to benefit children as well as adults. The most satisfied parents/guardians can have a positive effect on their children as patients. This may prove to be a useful element for further research as well as for evaluating the impact of specific interventions designed to evaluate parent satisfaction.²²

REFERENCES

- Donabedian A. The quality of care: How can it be assessed? Arch Pathol Lab Med J 1997; 11:1145–1150
- Fong C. The influence of insurance status on nonurgent pediatric visits to the emergency department. AcadEmergMed 1999; 6:744-748.
- Morrison AK, Schapira MM, Gorelick MH, et al. Low caregiver health literacy is associated with higher pediatric emergency department use and nonurgent visits. AcadPediatr 2014; 14:309-314.
- Zapka JG, Palmer RH, HargravewJL, Nerenz D, Frazier HS and Warner CK. Relationships of patient satisfaction with experience of system performance and health status. J Ambul Care Manage1995; 18 (1)Q 73-83
- Matziou V, Boutopoulou B, Chrysostomou A, Vlachioti E, Mantziou T and Petsios, K. Parents' satisfaction concerning their child's hospital care. Jpn J NursSci 2011; 8(2):163-173.

- Markovich P. A global budget pilot project among provider partners and Blue Shield of California led to savings in first two years. HealthAffairs (Millwood) 2012; 31(9): 1969–76.
- Johnson MB, Castillo EM, Harley J and Guss DA. Impact of patient and family communication in a pediatric emergency department on likelihood to recommend. PediatrEmergCare 2012; 28:243-246.
- Van den Eertwegh V, van der Vleuten C, Stalmeijer R et al. Exploring residents' communication learning process in the workplace: a five-phase model. PLoSOne 2015;10:e0125958.
- Aletras V, Bassiouris F, Kontoimopoulos N., Ioannidou D and Niakas D. Development of a Greek questionnaire of satisfaction of hospitalized patients and control of their basic psychometric properties. ArchivesofHellenicMedicine 2009; 26 (1): 79-89.
- Papayannopoulou V, Pierrakos G, Sarris M and Yfantopoulos G. Measuring the satisfaction of the provided health services in a pediatric hospital in Attica. ArchivesofHellenicMedicine 2008; 25 (1): 73-82.
- Matziou V, Galanis P, Alexopoulou D, Vlachioti E and Tsoumakas C. How do parents evaluate the health care provided to their hospitalized children? Nosileftiki

Σελίδα | 316



2006; 45, 92–97 (inGreekwithEnglishabstract).

- Moumtzoglou A, Dafogianni C, Karra V, Michailidou D, Lazarou P and Bartsocas C.
 Development and application of a questionnaire for assessing parent satisfaction with care. Int J QualHealthCare 2000; 12(4):331-337.
- Ygge BM and Arnetz JE. Quality of paediatric care: application and validation of an instrument for measuring parent satisfaction with hospital care. Int J QualHealthCare 2001 Feb;13(1):33-43.
- Williams E. Paediatric inpatient setting: an evaluation of parental perspectives. Br J Nurs 2013;22(11):630-633.
- Kalogeropoulou M. Patient Satisfaction Measurement. Method of improving the quality and efficiency of hospitals. ArchivesofHellenicMedicine 2011; 28 (5): 667-673.
- 16. Green N, Durani Y, Brecher D, DePiero A, Loiselle J and Attia M. Emergency Severity Index version 4: a valid and reliable tool in pediatric emergency department triage. PediatrEmergCare 2012;28:753-757.
- 17. Solheim E and Garratt AM. Parent experiences of inpatient pediatric care in relation to health care delivery and sociodemographic characteristics: results of a Norwegian national survey. BMC HealthServRes 2013 Dec;13:512.

Τόμος 19, Τεύχος4 (Οκτώβριος - Δεκέμβριος 2020)

- Rhee K, Bird G. Perceptions and satisfaction with emergency department care. J. Emerg. Med 1996;14: 679–83.
- 19. O'Malley PJ, Brown K and Krug SE. Committee on Pediatric Emergency Medicine. Patient- and family-centered care of children in the emergency department. Pediatrics 2008;122:e511-521.
- 20. Pham JC, Trueger NS, Hilton J, et al. Interventions to improve patientcentered care during times of emergency department crowding. AcadEmerg Med 2011; 18:1289-1294
- Pagnamenta R and Benger JR. Factors influencing parent satisfaction in a children's emergency department: prospective questionnaire-based study. Emerg Med J 2008; 25:417-419.
- 22. Welch SJ. Twenty years of patient satisfaction research applied to the emergency department: a qualitative review. Am J MedQual, 2010; 25:64-72.

ANNEX

Table 1.Demographics and hospitalization characteristics.

| Characteristic | N (%) |
|---|-------------|
| Parents or relatives of the hospitalized children | |
| Respondent | |
| Father | 21 (21,0) |
| Mother | 63 (63.0) |
| Otherrelative | 16 (16.0) |
| Age ^a | 39.0 (13.5) |
| Nationality | |
| Greek | 81 (81.0) |
| Other | 19 (19.0) |
| Educationallevel | |
| Did not finish primary school | 4 (4.0) |
| Primaryschool | 11 (11.0) |
| Secondaryschool | 23 (23.0) |
| Highschool | 33 (33.0) |
| University | 18 (18.0) |
| MSc/PhD | 11 (11.0) |
| Hospitalizedchildren | |
| Gender | |
| Boy | 56 (56.0) |
| Girl | 44 (44.0) |
| Age ^b | 6.0 (8.0) |
| Hospitalizationcharacteristics | |
| Previoushospitalizationinhospital | |
| No | 56 (56.0) |
| Yes | 44 (44.0) |
| Admission when the hospital was on call | |
| No | 35 (35.0) |
| Yes | 65 (65.0) |

Values are expressed as n (%) unless otherwise stated.

a Mean value (standard deviation)

b Median (interquartile range).



Τόμος 19, Τεύχος4 (Οκτώβριος - Δεκέμβριος 2020)

Table 2. Parents' and relatives' responses regarding their evaluation of the Emergency Department and of the administrative services.

| Characteristic | N (%) |
|---|-----------|
| Was the waiting time for your child's emergency medical | |
| exam long? | |
| No | 41 (41.0) |
| Yes | 59 (59.0) |
| Was the emergency room clean? | |
| No | 8 (8.1) |
| Yes | 91 (91.9) |
| Was your child properly isolated during the medical | |
| examination so he/she would not be seen or heard by | |
| people who should not? | |
| No | 25 (25.0) |
| Yes | 75 (75.0) |
| What was your impression by the administrative staff | |
| (service, kindness) | |
| Verybad | 5 (5.1) |
| Bad | 2 (2.0) |
| Neithergoodnorbad | 30 (30.3) |
| Good | 30 (30.3) |
| Verygood | 32 (32.3) |
| What was your impression by the speed with which the | |
| administrative staff handled the admission procedures | |
| (waiting time for a ticket)? | |
| Verybad | 6 (6.0) |
| Bad | 4 (4.0) |
| Neithergoodnorbad | 22 (22.0) |
| Good | 48 (48.0) |
| Verygood | 20 (20.0) |

Values are expressed as n (%).

Table 3. Parents' and relatives' responses regarding their evaluation of the Quality of nursing andmedical care during the child's admission to the hospital.

| Characteristic | N (%) |
|---|-----------|
| Quality of nursing care | |
| During your stay in the hospital, were the nurses late in | |
| responding to your calls/requests? | |
| Never | 76 (76.0) |
| Sometimes | 18 (18.0) |
| Usually | 6 (6.0) |
| During your stay in the hospital, were the nurses willing to | |
| discuss your anxieties and fears regarding your child's health? | |
| Never | 1 (1.0) |
| Sometimes | 9 (9.0) |
| Usually | 31 (31.0) |
| Always | 59 (59.0) |
| During your hospital stay, how often did nurses treat you with | |
| kindness? | |
| Never | 1 (1.0) |
| Sometimes | 11 (11.0) |
| Usually | 12 (12.0) |
| Always | 76 (76.0) |
| During your hospital stay, how often did the nurses explain | |
| things to you? | |
| Never | 2 (2.0) |
| Sometimes | 10 (10.0) |
| Usually | 35 (35.0) |
| Always | 53 (53.0) |
| Were the nurses patient with your child while you were in the | |
| hospital? | |
| Never | 1 (1.0) |
| Sometimes | 6 (6.1) |
| Usually | 11 (11.1) |



Τόμος 19, Τεύχος4 (Οκτώβριος - Δεκέμβριος 2020)

| Always | 81 (81.8) |
|--|-----------|
| Evaluation of the care your child received from the nursing | |
| staff | |
| Excellent | 40 (40.0) |
| Verygood | 36 (36.0) |
| Good | 21 (21.0) |
| Moderate | 3 (3.0) |
| Quality of medical care | |
| During your hospital stay, how often did the doctors treat you | |
| with kindness? | |
| Never | 5 (5.0) |
| Sometimes | 16 (16.0) |
| Usually | 78 (78.0) |
| Always | 1 (1.0) |
| During your hospital stay, how often did your doctors listen to | |
| you carefully? | |
| Sometimes | 7 (7.0) |
| Usually | 18 (18.0) |
| Always | 75 (75.0) |
| During your hospital stay, how often did the doctors explain | |
| things to you? | |
| Never | 1 (1.0) |
| Sometimes | 8 (8.0) |
| Usually | 28 (28.0) |
| Always | 63 (63.0) |
| During your hospital stay, did your doctors often visit the ward | |
| to inform you about your child's health? | |
| Never | 4 (4.0) |
| Sometimes | 16 (16.2) |
| Usually | 41 (41.4) |
| Always | 38 (38.4) |
| Do you feel that you were sufficiently informed about the | |

| interventions and treatment procedures? | |
|---|-----------|
| No | 3 (3.0) |
| Yes | 96 (97.0) |

Values are expressed as n (%).

Table 4. Parents' and relatives' responses regarding their overall satisfaction with the medical andnursing staff and their overall hospital rating score.

| Characteristic | N (%) |
|--|-----------|
| What do you think of the medical experience and competence? | |
| Verybad | 3 (3.1) |
| Bad | 1 (1.0) |
| Neithergoodnorbad | 12 (12.2) |
| Good | 33 (33.7) |
| Verygood | 49 (50.0) |
| During your hospital stay did you receive immediate help and | |
| care for any pain or fever? | |
| No | 2 (2.0) |
| Yes | 97 (98.0) |
| Do you think that the nursing staffing of the clinic was: | |
| Notsufficient | 75 (75.8) |
| Sufficient | 24 (24.2) |
| Do you think that the medical staffing of the clinic was: | |
| Notsufficient | 30 (30.6) |
| Sufficient | 68 (69.4) |
| When you left the clinic were you given written instructions | |
| for your child's aftercare? | |
| No | 2 (2.0) |
| Yes | 98 (98.0) |

Values are expressed as n (%).



Τόμος 19, Τεύχος4 (Οκτώβριος - Δεκέμβριος 2020)

Table 5. Bivariate analyses between the demographics and hospitalization characteristics and themedical staff rating score, the nursing staff rating score and the overall hospital rating score

| Characteristic | Mean medical staff rating score(SD) | P-value | Mean nursing staff rating score (SD) | P-value | Mean overall hospital rating score(SD) | P-value |
|---|--|---------------------------|---|---------------------------|--|---------------------------|
| Age of parent or relative | 0.160α | 0.112 ^a | 0.153α | 0.129 ^a | 0.010α | 0.919 ^a |
| Nationality of parent or relative | | 0.805 ^b | | 0.366 ^b | | 0.113 ^b |
| Greek | 3.3 (0.6) | | 3.1 (0.9) | | 7.9 (1.4) | |
| Other | 3.3 (0.5) | | 3.3 (0.7) | | 8.3 (0.8) | |
| Educational level of parent or relative | | 0.426 ^c | | 0.173 ° | | 0.109 ^c |
| Did not finish primary school | 3.1 (0.9) | | 2.5 (1.0) | | 7.8 (1.0) | |
| Primaryschool | 3.5 (0.3) | | 3.6 (0.5) | | 8.6 (0.7) | |
| Secondaryschool | 3.4 (0.5) | | 3.2 (0.9) | | 8.5 (1.1) | |
| Highschool | 3.1 (0.7) | | 3.1 (0.9) | | 7.8 (1.7) | |
| University | 3.3 (0.5) | | 2.9 (0.8) | | 7.7 (0.9) | |
| MSc/PhD | 3.3 (0.5) | | 3.2 (0.8) | | 7.6 (1.0) | |
| Gender | | 0.566 ^b | | 0.762 ^b | | 0.986 ^b |
| Воу | 3.2 (0.5) | | 3.1 (0.9) | | 8.0 (1.1) | |
| Girl | 3.3 (0.6) | | 3.2 (0.8) | | 8.0 (1.5) | |
| Age | 0.214δ | 0.032 ^d | 0.161 ^δ | 0.109 ^d | -0.004 ^δ | 0.968 ^d |
| Previoushospitalizationinhospital | | 0.810 ^b | | 0.395 ^b | | 0.772 ^b |
| No | 3.3 (0.5) | | 3.2 (0.7) | | 8.1 (1.0) | |
| Yes | 3.3 (0.6) | | 3.0 (1.0) | | 8.0 (1.5) | |
| Admission to the clinic when the | | 0.908 ^b | | 0.405 ^b | | 0.026 ^b |
| hospital was on call? | | 0.900 | | 0.403~ | | 0.020~ |
| No | 3.3 (0.5) | | 3.2 (0.9) | | 8.4 (1.0) | |
| Yes | 3.3 (0.6) | | 3.1 (0.8) | | 7.8 (1.4) | |
| Was the waiting time for your | | 0.063 ^b | | 0.039 ^b | | 0.004 ^b |

| child's emergency medical exam | | | | |
|--------------------------------|-----------|-----------|-----------|--|
| long? | | | | |
| No | 3.4 (0.5) | 3.3 (0.9) | 8.4 (1.1) | |
| Yes | 3.2 (0.6) | 3.0 (0.8) | 7.7 (1.3) | |

Values are expressed as mean (standard deviation) unless otherwise stated.

a Pearson's correlation coefficient.

b Student's t-test.

c Analysis of variance.

d Spearman's correlation coefficient.



Τόμος 19, Τεύχος4 (Οκτώβριος - Δεκέμβριος 2020)

Table 6. Multivariate linear regression (dependent variables: medical staff rating score, nursing

staff rating score and overall hospital rating score).

| | Coefficients' beta | 95% CIs | P-value | | | |
|---|-----------------------|-------------------|---------|--|--|--|
| Dependent variable: nursing staff rating score | | | | | | |
| Long waiting time for emergency medical | -0.358 | -0.695 έως -0.022 | 0.037 | | | |
| examination Dependent variable: over | all hospital rat | ting score | | | | |
| Long waiting time for emergency medical examination | -0.814 | -1.323 έως -0.305 | 0.002 | | | |