Development and application of a questionnaire for assessing parent satisfaction with care

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Abstract

Objective. The development and application of a questionnaire that eventually could be used as a management tool and a means of promoting the quality of care provided in ‘P. & A. Kyriakou’ Children’s Hospital.


Setting. ‘P. & A. Kyriakou’ Children’s Hospital, Athens, Greece.

Participants. Sample of 240 parents.

Main outcome measure. Parent satisfaction.

Results. The most important finding of the study, although normative statements cannot be made, appears to be signalling of low satisfaction with care. The general mean observed (45 on a scale of 100) is not close to the mean (76) derived from a systematic review of 221 satisfaction studies. Moreover, satisfaction appears to be very low (14/100) for the procedures of the hospital, low for the outpatient dimension (42/100) and rather satisfactory for the inpatient dimension (61/100).

Conclusion. Data-based feedback as a management tool has been associated with improved organizational functioning. However, systematic use of this intervention within Greek hospitals has been limited. Therefore, the next phase of the project will be used as feedback to the Governing Board and the personnel of the hospital. Finally, a study will be planned to investigate the effects of implementing changes based on parents’ ratings of staff performance.

Keywords: paediatric hospital, parent satisfaction, reliability and validity

Hospitals are facing the challenge of defining and measuring quality. One widely accepted measure of quality is customer satisfaction [1,2]. However, Lebow found little consensus regarding either the meaning or the measurement of patient satisfaction [3]. He reported efforts to develop patient satisfaction scales but found little systematic testing for validity and reliability. Moreover, Locker and Dunt [4] noted several methodological issues in the measurement and use of consumer opinions. First, as no standardized method for measuring consumer evaluation of care was used, no comparisons between studies could be made. Second, they suggested that any measure of consumer satisfaction should have a multi-dimensional scale and that measures should pose direct questions related to actual experiences of care. Furthermore, patient’s perceptions of positive physician attributes and behaviours have been associated with increased satisfaction [5,6]. Patients are positively affected by physician attributes such as interest, caring, warmth, responsiveness and anticipation of maternal concerns. Shorter contends that patients’ most significant criticism about health care focuses on the nature of the relationship with the care provider [7]. Inevitably, a great deal of the literature in this area deals with basic communication styles and attempts to delineate physician communications and determine variables related to communication style. Researchers have described paediatrician-to-parent conversations as being primarily directed towards information and motivation [8]. According to their

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findings, both of these goals have been linked to patient compliance and treatment adherence.

Street operationalized the paediatrician goals into three distinct communication styles [9]:

- informativeness – refers to the quantity and quality of medical and health information;
- interpersonal sensitivity – includes affective behaviours, which reflect physician attention and interest;
- partnership-building – represents the extent to which the physician solicits parent participation, opinions and suggestions.

Finally, there can surely be little argument that communication is a central part of nursing practice. The importance of good communication in the delivery of effective and appropriate nursing has been well demonstrated by research and reflected in policy documents [10,11].

However, all of these findings have not been included in a questionnaire with particular reference to parent satisfaction in a paediatric hospital. Research on parents of paediatric patients has only presented a questionnaire to measure parent satisfaction with medical encounters, showing that satisfaction predicts compliance with medical regimen.

So, the purpose of this study, which was conducted between October 1997 and September 1998, is twofold. First, to attempt to develop a questionnaire for assessing parent satisfaction with inpatient and outpatient care in paediatric hospitals, taking into account that item pool selection should incorporate the importance of the communication skills of the personnel. Second, to elicit parents’ assessments of care in the particular setting of ‘P. & A. Kyriakou’ Children’s Hospital and possibly identify risk factors for their dissatisfaction.

**Methods**

**Study design**

The development of the questionnaire began with the notion that it would eventually be used as a tool to assess parent satisfaction with care and as a means of promoting changes in the quality of care provided by the ‘P. & A. Kyriakou’ Children’s Hospital.

Initially, the authors identified the need for participation by each department in the selection of the item pool. The selection of items for the study involved determining the departments of a hospital whose personnel is in direct contact with the parent. Nursing in ambulatory care, admissions office, nursing and medical staffs of the clinics and environmental services were initially included. Also, selection of the items required that a result be a behavioural observation that could be measured.

Under these considerations, the questionnaire was developed pursuing the following rules:

- the survey’s purpose was to elicit a behavioural observation that could be measured;
- the questions should be simple, because compound sentences force respondents to keep a lot of information and are likely to produce unpredictable results;
- imprecise language and leading questions should be avoided;
- respondents should have enough information;
- open-ended questions should be kept to a minimum, because they not only result in respondent fatigue, but they pose problems in terms of coding and analysis;
- the end points of the response scales should be anchored with meaningful scales and an odd number of points would be avoided because it provides a middle alternative.

After assembling the item pool, the authors reworked the items to meet a measurable, consistent format. Finally, the ethics committee of the hospital studied and approved the content of the questionnaire.

**Pilot study**

These efforts resulted in a pilot questionnaire, which was administered to a sample of 80 parents. The pilot questionnaire consisted of 37 items, some with multiple parts. Face-to-face interview was selected and three students of the Nursing Faculty of the University of Athens were trained by one of the authors (C.D.) in the standardized procedures for administering the questionnaire.

Finally, one of the authors (C.D.) supervised the methods of administration and asked participants to make comments and suggestions about clarity, readability and suitability of the questionnaire.

**Construct validity**

Non-linear principal components analysis was used and as a guideline, items with substantial loadings (≥ 0.4) on only one factor were to be retained. Moreover, items were allocated to the dimension on which their loading was highest; when two loadings were close to each other, the item was allocated to the dimension showing the highest loading. It was also important that items demonstrate reasonable degree of inter-item independence.

According to these guidelines, the questionnaire was reduced to 22 questions. Loadings on only one factor were > 0.4 and inter-item correlation mean was 0.1322.

**Preliminary reliability**

One aspect of reliability, appropriate for the questions retained, was an estimate of the internal consistency of the scales. Cronbach’s $\alpha$ statistic, chosen to measure reliability, exceeded the minimum reliability of 0.7. Specifically, Cronbach’s $\alpha$ was 0.7320 and the standardized item $\alpha$ was 0.7618.
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Description of the questionnaire

The final form of the questionnaire is a 22-item instrument including attitudinal questions about nursing in ambulatory care, admissions office, nursing and medical staff of the clinics. There is also a cover sheet introducing the project and requesting certain demographic data.

To prevent influence caused by the series of positive or negative responses, the order of the questionnaire items is balanced according to favourable and unfavourable wording. Most items are scored on a 5-point scale with 1 being the highest positive rating, and questions dealing with hospital procedures are of the positive/negative response type.

Statistical analysis

Non-linear principal components analysis on the 22 items was used to identify independent dimensions of satisfaction. Non-linear principal components analysis is also known as categorical principal components with optimal scaling. The procedure simultaneously quantifies categorical variables while reducing the dimensionality of the data.

Standard principal components analysis assumes linear relationships between numerical variables. The optimal scaling approach, on the other hand, allows variables to be scaled at different levels. As a result non-linear relationships between variables can be modelled.

Based on the non-linear principal components analysis results, satisfaction scores for the dimensions were computed. Differences in satisfaction by department were examined using ANOVA.

Finally, to identify predictors of satisfaction logistic regression was used. Satisfaction scores for the whole sample were computed and recoded into a dichotomous variable by designating satisfaction scores of > 50 on a scale of 100 as showing satisfaction. The independent variables were recoded automatically by SPSS.

Study setting

The ‘P. & A. Kyriakou’ Children’s Hospital is a 395-bed facility situated in Athens, Greece. The hospital covers almost all specialties in outpatient and inpatient services and ranks highly in Greece with approximately 22,000 admissions per year and an average inpatient stay of 3.6 days.

Study participants

Sampling procedure

After finalizing the form of the questionnaire, a stratified random sampling technique was used when administering the questionnaire, with the goal of sampling sufficient parents from each clinic. The quota for each clinic followed the quota of the actual hospital population and the room and bed numbers were selected randomly, after hospitalization of 2 days, in order to fill the quota. All clinics were sampled except intensive care areas. Parents in these areas could not provide adequate information because, due to hospital conditions, they had little communication with the personnel of the ward. Moreover, not including intensive care areas could not bias the results because a very small number of parents from these areas should participate.

Administration procedure

Face-to-face interview was selected and the three students of the Nursing Faculty of the University of Athens were given procedural guidelines and specific instructions for selection of subjects. In addition, they observed the trainer administer the questionnaire and were observed between themselves.

Description of sample

Adopting a rather conservative method for determining the sample size, it was assumed that the sample size could be given by the equation:

\[
\frac{(P_1)(1-P_1)}{SE^2}
\]

where \(P_1\) and \(P_2\) represent the respective positive and negative proportion of respondents, while the SE when multiplied by the coefficient 1.96 can be thought as the sampling error. Assuming maximum variation (50/50%) in responses across questions and a 95% confidence interval (CI), the standard error was found by dividing the sampling error (5%) by 1.96. Then, the result was squared to arrive at the denominator of the equation. Finally, it was computed that the sample size should be 384 respondents.

However, due to the unwillingness of parents to respond to the questionnaire, only 240 questionnaires were collected. So, the sample size, although it compared favourably with those of other studies, was thought to be too small for the results to be accurate within ±5% or with respect to the sample average of other studies [12]. However, it is highly representative of the general hospital population as shown by the proximity matrix computed by SPSS [13]. The correlation between the vectors of values for the population and the sample was 0.901.

Most of the parents (65.8%) were from Athens, 78.8% had completed secondary education and 11.3% had a university degree. The majority (57.9%) had no experience of prior treatment of their child in the hospital, 26.3% had experience of one prior treatment, 9.2% of two prior treatments, 2.9% of three prior treatments, 2.5% of four prior treatments and the remainder from five to seven prior treatments. Finally, 52.2% of the children had length of stay up to 6 days. The children were suffering from respiratory (25.4%), urological (11.3%), cardiovascular (1.7%), neurological (3.3%), febrile (12.1%), immunological (1.7%), digestive (6.3%), endocrinological (1.7%), ophthalmological (0.8%), orthopaedic (10.4%) and otolaryngeal (10.0%) diseases. There also were surgical patients (10.8%) and accidents (4.6%).

Results

Properties of the questionnaire

The proportion of missing answers (Table 1) was high for the behaviour (NSO), the skills (NSKO), organization (NOO)

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Table 1: Distribution of answers to satisfaction questionnaire among 240 parents in ‘P. & A. Kyriakou’ Children’s Hospital (%)

<table>
<thead>
<tr>
<th>Question abbreviation¹</th>
<th>Response</th>
<th>Missing</th>
<th>Best</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>Worst</th>
</tr>
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<tbody>
<tr>
<td>NSO</td>
<td>43.8</td>
<td>3.3</td>
<td>31.7</td>
<td>6.7</td>
<td>10.8</td>
<td>3.8</td>
<td></td>
</tr>
<tr>
<td>NSKO</td>
<td>44.2</td>
<td>1.3</td>
<td>34.2</td>
<td>7.9</td>
<td>12.1</td>
<td>0.4</td>
<td></td>
</tr>
<tr>
<td>NOO</td>
<td>44.2</td>
<td>1.7</td>
<td>31.7</td>
<td>4.6</td>
<td>16.7</td>
<td>1.3</td>
<td></td>
</tr>
<tr>
<td>NIO</td>
<td>44.2</td>
<td>1.7</td>
<td>33.3</td>
<td>6.7</td>
<td>12.1</td>
<td>2.1</td>
<td></td>
</tr>
<tr>
<td>AS</td>
<td>12.5</td>
<td>3.8</td>
<td>63.3</td>
<td>6.3</td>
<td>10.8</td>
<td>3.3</td>
<td></td>
</tr>
<tr>
<td>ASK</td>
<td>12.9</td>
<td>3.8</td>
<td>75</td>
<td>3.8</td>
<td>5.8</td>
<td>0.4</td>
<td></td>
</tr>
<tr>
<td>AO</td>
<td>12.5</td>
<td>5</td>
<td>72.5</td>
<td>3.8</td>
<td>4.6</td>
<td>2.5</td>
<td></td>
</tr>
<tr>
<td>AI</td>
<td>12.5</td>
<td>3.3</td>
<td>59.2</td>
<td>17.9</td>
<td>4.6</td>
<td>3.8</td>
<td></td>
</tr>
<tr>
<td>NC</td>
<td>0.4</td>
<td>15.8</td>
<td>83.7</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>TI</td>
<td>0.4</td>
<td>10.4</td>
<td>89.2</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ES</td>
<td>0.8</td>
<td>12.5</td>
<td>87.5</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>VT</td>
<td>0.4</td>
<td>10.4</td>
<td>89.6</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>SCN</td>
<td>0.4</td>
<td>5</td>
<td>61.3</td>
<td>13.3</td>
<td>14.6</td>
<td>5.4</td>
<td></td>
</tr>
<tr>
<td>SKN</td>
<td>0.8</td>
<td>4.2</td>
<td>69.6</td>
<td>16.7</td>
<td>8.3</td>
<td>0.4</td>
<td></td>
</tr>
<tr>
<td>ON</td>
<td>0.8</td>
<td>2.5</td>
<td>58.8</td>
<td>15.4</td>
<td>20.8</td>
<td>1.7</td>
<td></td>
</tr>
<tr>
<td>IN</td>
<td>0.8</td>
<td>3.3</td>
<td>60</td>
<td>16.7</td>
<td>14.2</td>
<td>5.4</td>
<td></td>
</tr>
<tr>
<td>PDHT</td>
<td>0.8</td>
<td>11.3</td>
<td>25.4</td>
<td>25.4</td>
<td>37.1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>PDI</td>
<td>0.8</td>
<td>16.3</td>
<td>15.8</td>
<td>17.9</td>
<td>49.6</td>
<td>0.4</td>
<td></td>
</tr>
<tr>
<td>DS</td>
<td>0.8</td>
<td>12.5</td>
<td>60.4</td>
<td>9.2</td>
<td>15.4</td>
<td>2.5</td>
<td></td>
</tr>
<tr>
<td>DSK</td>
<td>0.8</td>
<td>13.8</td>
<td>72.1</td>
<td>5.4</td>
<td>8.3</td>
<td>0.4</td>
<td></td>
</tr>
<tr>
<td>DO</td>
<td>0.8</td>
<td>10.8</td>
<td>57.9</td>
<td>15.8</td>
<td>13.3</td>
<td>2.1</td>
<td></td>
</tr>
<tr>
<td>DI</td>
<td>0.8</td>
<td>11.7</td>
<td>57.9</td>
<td>17.5</td>
<td>10</td>
<td>2.9</td>
<td></td>
</tr>
</tbody>
</table>

¹ For explanation of question abbreviations, see Appendix.

and interest (NIO) of the nursing personnel in ambulatory care (for definitions see Appendix). As there were no parents who simply did not fill in an answer, these answers are really ‘no opinion’, because some parents had no experience of ambulatory care in the hospital. Furthermore, all questions showed negligible ceiling or floor effects and distributions skewed to the second best answer.

Non-linear principal components analysis refuted hospital structure as only three dimensions were identified (Table 2). The attitude, skills, organization and interest in the patient of doctors and nurses in clinics loaded on the first dimension (inpatient). The attitude, skills, organization and interest in the patient of the nursing personnel in ambulatory care and those of the admissions office loaded on the second dimension (outpatient) and information about hospital procedures were loaded on the third dimension (procedures). Only the item with reference to the attitude of the admissions office had to be allocated to the second best answer.

The determination of how many dimensions were actually represented in the data was reached through subjective evaluation and total fit. One objective was to obtain the best fit with the smallest possible number of dimensions. Interpretation of solutions derived in more than three dimensions was extremely difficult and not worth the improvement in fit. Total fit for two dimensions was 0.4253 and for the three dimensions 0.5478.

Based on this analysis three scales were constructed by summing corresponding items and internal consistency coefficients were computed for the questionnaire and the scales. Internal consistency coefficients (Cronbach's $\alpha$) [14,15] were high for the whole questionnaire, second and third dimension and modest for the first dimension (Table 3).

Furthermore, satisfaction scores for the dimensions and the whole questionnaire were computed, according to the formula:

$$\frac{\alpha - 1}{\beta - 1}$$

where $\alpha$ is the mean to be transformed and $\beta$ is the number of points on the scale to which subjects responded [11]. To illustrate the formula, if the parents had mean satisfaction 3.5 on the scale, their transformed mean would be 0.62. During the computation of satisfaction scores, the items of the questionnaire were recoded so that higher values indicated greater satisfaction.

Scores were very low except for the attitude, skills, organization and interest in the patient of doctors and nurses in clinics (Table 3). In particular, satisfaction score for the procedures dimension was very low.

Predictors of satisfaction

Satisfaction did not differ by department ($F=1.086$, $P=0.374$), type of medical problem ($F=1.130$, $P=0.337$), duration of treatment ($F=1.115$, $P=0.34$), parent’s education
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Table 2 Component loadings on three dimensions after non-linear principal components analysis

<table>
<thead>
<tr>
<th>Question abbreviation</th>
<th>Inpatient</th>
<th>Outpatient</th>
<th>Procedures</th>
</tr>
</thead>
<tbody>
<tr>
<td>NSO</td>
<td>0.451</td>
<td>−0.602</td>
<td>−0.002</td>
</tr>
<tr>
<td>NSKO</td>
<td>0.487</td>
<td>−0.666</td>
<td>0.010</td>
</tr>
<tr>
<td>NOO</td>
<td>0.481</td>
<td>−0.528</td>
<td>−0.114</td>
</tr>
<tr>
<td>NIO</td>
<td>0.393</td>
<td>−0.632</td>
<td>−0.007</td>
</tr>
<tr>
<td>AS</td>
<td>0.335</td>
<td>−0.318</td>
<td>0.338</td>
</tr>
<tr>
<td>ASK</td>
<td>0.172</td>
<td>−0.577</td>
<td>0.464</td>
</tr>
<tr>
<td>AO</td>
<td>0.150</td>
<td>−0.525</td>
<td>0.443</td>
</tr>
<tr>
<td>AI</td>
<td>0.311</td>
<td>−0.407</td>
<td>0.266</td>
</tr>
<tr>
<td>NC</td>
<td>0.321</td>
<td>0.349</td>
<td>0.590</td>
</tr>
<tr>
<td>TI</td>
<td>0.357</td>
<td>0.346</td>
<td>0.724</td>
</tr>
<tr>
<td>ES</td>
<td>0.393</td>
<td>0.265</td>
<td>0.652</td>
</tr>
<tr>
<td>VT</td>
<td>0.235</td>
<td>0.386</td>
<td>0.676</td>
</tr>
<tr>
<td>SCN</td>
<td>0.694</td>
<td>0.169</td>
<td>0.006</td>
</tr>
<tr>
<td>SKN</td>
<td>0.654</td>
<td>−0.088</td>
<td>−0.196</td>
</tr>
<tr>
<td>ON</td>
<td>0.703</td>
<td>0.089</td>
<td>−0.276</td>
</tr>
<tr>
<td>IN</td>
<td>0.752</td>
<td>0.077</td>
<td>−0.222</td>
</tr>
<tr>
<td>PDHT</td>
<td>−0.652</td>
<td>−0.260</td>
<td>0.143</td>
</tr>
<tr>
<td>PDI</td>
<td>−0.531</td>
<td>−0.329</td>
<td>0.061</td>
</tr>
<tr>
<td>DS</td>
<td>0.710</td>
<td>0.204</td>
<td>−0.187</td>
</tr>
<tr>
<td>DSK</td>
<td>0.609</td>
<td>0.322</td>
<td>−0.142</td>
</tr>
<tr>
<td>DO</td>
<td>0.689</td>
<td>0.140</td>
<td>−0.223</td>
</tr>
<tr>
<td>DI</td>
<td>0.739</td>
<td>0.125</td>
<td>−0.231</td>
</tr>
</tbody>
</table>

1 For explanation of question abbreviations, see Appendix.

Table 3 Satisfaction scores and internal consistency coefficients among 240 parents in ‘P. & A. Kyriakou’ Children’s Hospital

<table>
<thead>
<tr>
<th>Satisfaction scale</th>
<th>Mean (SD)</th>
<th>Internal consistency coefficient</th>
</tr>
</thead>
<tbody>
<tr>
<td>All items</td>
<td>0.45 (0.17)</td>
<td>0.73</td>
</tr>
<tr>
<td>Inpatient</td>
<td>0.61 (0.11)</td>
<td>0.54</td>
</tr>
<tr>
<td>Outpatient</td>
<td>0.42 (0.26)</td>
<td>0.80</td>
</tr>
<tr>
<td>Procedures</td>
<td>0.14 (0.46)</td>
<td>0.78</td>
</tr>
</tbody>
</table>

($F=0.761, P=0.638$) and profession ($F=0.607$, $P=0.750$) and place of residence ($F=0.735$, $P=0.480$). However, it was different according to the reason for admitting the child to the hospital ($F=34.447$, $P=0.000$).

Different logistic regressions were run for predictors of satisfaction on a continuous and on a dichotomous scale. The logistic regressions showed that the type of appointment was the only predictor of satisfaction ($P=0.0000$). The result applies to 22-item satisfaction score and whole sample because other regressions did not trace any predictor of satisfaction. Independent variables included clinics, child’s age, sex, disease, prior treatment and duration of treatment, and parent’s sex, age, education, occupation and place of residence.

The odds that the dependent variable takes the value of 1 could increase by 0.0779 while the lower limit of the 95% CI of the exponent was 0.0235 and the upper limit was 0.2583. The proportion of cases classified correctly was 67.50%.

There is no single standard measure for determining the predictive accuracy of the logistic model. Instead, there are several $R^2$-type measures that have been suggested for models with qualitative dependent variables. The value for Darlington’s statistic [16] was 0.308, the Cox and Snell value was 0.126 and the Nagelkerke value was 0.176.

Discussion

We encountered a few problems with the survey. There were many ‘no opinion’ answers for the behaviour (NSO), the skills (NSKO), organization (NOO) and interest (NIO) of the nursing personnel in ambulatory care, due to accessibility reasons. Furthermore, we could not avoid an odd number of points in the response scales because some of the response scales proved meaningless during the pilot study.

However, the questionnaire had adequate psychometric properties. The proportion of missing answers was low for most of the questions and the internal consistency coefficients, with the exception of the inpatient dimension, exceeded the minimum reliability of 0.7.

Tests of validity also yielded favourable results. Data reduction analysis identified three dimensions of satisfaction, separating the attitude, skills, organization and interest in the patient of doctors and nurses in clinics, which loaded on the first dimension (inpatient). The attitude, skills, organization and interest in the patient of the nursing personnel in ambulatory care and those of the admissions office loaded on the second dimension (outpatient) and information about hospital procedures was loaded on the third dimension (procedures).

The most important finding of the study appears to be, even though no norms exist for the instrument used, signalling of low satisfaction with care. The general mean observed (45 on a scale of 100) is not close to the mean (76) derived from a systematic review of 221 satisfaction studies [12]. Moreover, satisfaction appears to be very low (14/100) for the procedures of the hospital, low for the outpatient dimension (42/100) and rather satisfactory for the inpatient dimension (61/100).

These findings are worrisome! Nevertheless, normative statements cannot be made. Taking into account that no norms exist for the instrument used and that the hospital serves as the major paediatric emergency care institution, covering tertiary care needs for patients from all over the country, further investigation of factors involved is necessary. Moreover, it should be taken into account that our findings are compared with the methodology and results of adult patients because little attention has been given by researchers to how children learn about the management of their own health and illness [17].

Furthermore, previous studies show that satisfaction is

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strongly related to the quality of the parent–provider relationship [8] and expectations might be different in many encounters [18]. However, this association may be due to confounding by a non-specific tendency of the parent to give favourable answers. Finally, an intriguing finding is that parents’ age was not associated with higher satisfaction. Older age has been associated with higher satisfaction in a progressive manner [19], but it is unclear whether older people are easier to satisfy or less likely to express dissatisfaction. A plausible explanation lies in the distribution of parent’s ages, which ranged from 21 to 55 years.

In conclusion, the results of the questionnaire showed that data-based feedback, ignored as a management tool in Greek hospitals, could provide valuable information. So, the next phase of the project will be used as feedback to the Governing Board and the personnel of the hospital in order to investigate the effects of implementing changes based on parents’ ratings of staff performance. Moreover, the application of the questionnaire will be expanded to other pediatriac hospitals so that conclusions can be generalized.

References


Appendix

The final 22 questions of the questionnaire and their abbreviations, which are found in the text, are the following.

- NSO, How do you describe the sensitivity of communication of nursing personnel in ambulatory care?
- NSKO, How do you rate the skills of nursing personnel in ambulatory care?
- NOO, How do you rate the organization of nursing personnel in ambulatory care?
- NIO, How do you describe the interest in the patient of nursing personnel in ambulatory care?
- AS, How do you describe the sensitivity of communication with the admissions office personnel?
- ASK, How do you rate the skills of admissions office personnel?
- AO, How do you rate the organization of admissions office personnel?
- AI, How do you describe the interest in the patient of the admissions office personnel?
- NC, Were you informed about the place of the office of the nurse in charge?
- TI, Were you informed about the toilets?
- ES, Were you informed about the emergency setting?
- VT, Were you informed about visiting hours?
- SCN, How do you describe the sensitivity of communication of the nursing personnel in your clinic?
- SKN, How do you rate the skills of the nursing personnel in the clinic?
ON, How do you rate the organization of the nursing personnel in the clinic?
IN, How do you describe the interest in the patient of the nursing personnel in the clinic?
PDHT, How do you describe your communication with the doctor?
PDI, Were you informed by the doctor about your child's health?

DS, How do you describe the sensitivity of communication with doctors?
DSK, How do you rate the skills of the doctors?
DO, How do you rate the organization of the doctors?
DI, How do you rate the interest in the patient by the doctor?

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