

PARENTAL SATISFACTION WITH PEDIATRIC DAY CASE SURGERY

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Abstract

Background and aims: Children make excellent candidates for day case surgery. Satisfaction is an important measure of the outcome. The aim of this study was to establish the degree of parental satisfaction with day-case surgery for their children.

Materials and Methods: Parents of one hundred children were questioned. They were asked to answer questions on their level of satisfaction in several areas; communication with doctors (surgeon and anesthesiologist), physical conditions, staff's care, patients' problems and 2 open ended questions.

Results: Parents were most satisfied with nursing care and most dissatisfied with physical conditions. Ninetyseven per-cent of parents stated that, if given a choice they would opt for day case surgery for their child again.

Conclusions: There is a high rate of satisfaction with day case surgery, however, considerable effort is needed to prepare better physical conditions, better time schedule organizations, more anesthesia outpatient clinic consultations.

Keywords: Day-case surgery, parental satisfaction.

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Introduction

In recent years there has been an inclination towards performing increasing amounts of surgery on children on a day stay (ambulatory or outpatient) basis. Children make excellent candidates for day case surgery as they are usually healthy, free of systemic disease and typically require straight-forward, minor or intermediate surgical procedures. More than 60% of pediatric surgery in the USA is performed on an ambulatory basis¹.

There is evidence that satisfaction is an important measure of the outcome, both because it is related to improvement in health status and because it is useful in assessing patterns of communication^{2,3}. The latter is particularly important in pediatric care, because the quality of care has to satisfy both the children and their accompanying parents. Additionally, because the aim of outpatient surgery is to maximize surgical capacity, it is important to ensure that increased efficiency is not obtained at the expense of the overall quality of the treatment⁴.

Evaluation of quality of health care remains complex and challenging; a process which we nowadays cannot ignore. A total quality management used in many health care organizations emphasizes the use of outcome indicators as measures of quality. Satisfaction only occurs when services meet or exceed the customer's expectations or perceptions. For continued quality improvement, it is therefore imperative that health care providers know the customers' perceptions and expectations. This is especially true for day-case surgery. Data on this subject is very rare in the current literature⁵.

Although we know much about patient satisfaction in general, surgery in children differs in many ways from that in general population. First, there is external pressure from health authorities in the form of increasing demands for cost effectiveness and maximization of surgical capacity. In addition, the tight schedule in outpatient surgery may reduce the staff's ability to satisfy patients' needs. Furthermore, children do not have the same ability to express their needs as adults; thus, measures of treatment satisfaction in childhood surgery must consider both the

parents' and the children's experiences of surgery and care^{2,4}.

The aim of this study was to establish the degree of parental satisfaction with day-case surgery for their children.

Patients and Methods

The parents of the 100 children who were admitted for elective day-case surgery over a two-month period (April and May 2003) at Hacettepe University Hospital Ankara, Turkey, were prospectively studied. A prestudy was applied on 10 parents and questions were standardized. These were not included in the study.

Parents who refused to fill the questionnaire, were illiterate and whose children had to be admitted for overnight stay were excluded.

Before discharge parents were given a self-completion questionnaire. They had been informed that their answers would not effect the care given to their children. Parents were asked to answer questions regarding their level of satisfaction in several areas; communication with doctors (surgeon and anesthesiologist), physical conditions, staff's care, patients' problems and 2 open ended questions. Questions could be answered; very satisfied, satisfied, not sure, dissatisfied and extremely dissatisfied. But because of statistical problems questions were evaluated as satisfied (very satisfied, satisfied) or non satisfied (not sure, dissatisfied and extremely dissatisfied).

Responses from questionnaires were entered into statistical software for analysis. Standardized methods for exploration of ordinal variables were used. Inferences were examined by cross-table analysis (pearson χ^2 , likelihood, continuity correction and fishers exact tests). Differences were considered significant at a probability level of $p < 0.05$.

Results

One hundred children were included in the study. Children aged between 0-18 (Mean 5.52). Types of surgery were: ENT (57%), pediatric

surgery (27%), ophthalmic (7%), orthopedics (4%), plastic surgery (2%), urology (2%) and dental procedures (1%) (Table I).

Table I
Type of surgery

	(%)
ENT	57
Pediatric surgery	27
Eye	7
Orthopedics	4
Plastic surgery	2
Urology	2
Dental procedures	1

The parental education levels were as follows; Primary school 16%, high school 47% and university 37%. Thirty-six percent of children had previous surgery before this procedure (Table II).

Table II
Demographic data

	# of patients
Children	
Age (mean)	0-12 (5.52)
Female / male	38 / 62
Parents	
Age (mean)	20-48 (33.63)
Education	
Primary	16
High	47
University	37
Previous surgery	
Yes / No	36 / 64

In the Questionnaire. The first group of questions, parents were asked about communication with doctors. 88% of parents were satisfied with obtaining information from their surgeon. 64% of parents were visited by their anesthetist. When we asked these 64% of parents, satisfaction from their anesthetist, 64% were satisfied.

Questionnaire

You don't need to write your name. Your answers does not effect the patient care. Your opinions will help to improve our quality. After you finish the questionnaire please give it back to the nurse who handed it to you. Thank you.

Type of surgery: Parent's age:
 Procedure: Parent's education:
 Child's age: Child's sex:
 Child's previous operation:

Please choose the best answer;

1. Obtaining information from your surgeon before the operation
 a) very satisfied b) satisfied c) not sure d) dissatisfied e) extremely dissatisfied
 2. Did you meet with your anesthetist
 a) Yes b) No
 3. Meeting your anesthetist before the operation
 a) very satisfied b) satisfied c) not sure d) dissatisfied e) extremely dissatisfied
 4. Finding the location of day-case surgery unit
 a) very easily b) easily c) not sure d) difficult e) very difficult
 5. Waiting time before surgery
 a) very satisfied b) satisfied c) not sure d) dissatisfied e) extremely dissatisfied
 6. Fasting period of your child
 a) very satisfied b) satisfied c) not sure d) dissatisfied e) extremely dissatisfied
 7. Waiting room's cleanliness
 a) very satisfied b) satisfied c) not sure d) dissatisfied e) extremely dissatisfied
 8. Waiting room's comfort
 a) very satisfied b) satisfied c) not sure d) dissatisfied e) extremely dissatisfied
 9. Playing area for children
 a) very needed b) needed c) not sure d) needless e) extremely needless
 10. Quality of patient care
 a) very satisfied b) satisfied c) not sure d) dissatisfied e) extremely dissatisfied
 11. Waiting area used by pre and postoperative patients in the same time
 a) very satisfied b) satisfied c) not sure d) dissatisfied e) extremely dissatisfied
 12. Nursing care
 a) very satisfied b) satisfied c) not sure d) dissatisfied e) extremely dissatisfied
 13. Privacy
 a) very satisfied b) satisfied c) not sure d) dissatisfied e) extremely dissatisfied
 14. Receiving information about procedures
 a) very satisfied b) satisfied c) not sure d) dissatisfied e) extremely dissatisfied
 15. Receiving satisfactory answers to your questions
 a) very satisfied b) satisfied c) not sure d) dissatisfied e) extremely dissatisfied
 16. Adequate control of pain after the operation
 a) very satisfied b) satisfied c) not sure d) dissatisfied e) extremely dissatisfied
 17. Adequate control of nausea-vomiting after the operation
 a) very satisfied b) satisfied c) not sure d) dissatisfied e) extremely dissatisfied
 18. Would you opt for day case surgery unit for your child again
 a) Yes b) No
1. For improving our quality of care what would you prefer us to do/add?
 2. What member/members of our staff were you most satisfied with?

The second group of questions were about physical conditions of day-case surgery unit. Ninety-eight per-cent of parents found the place of day-case surgery unit easily. Parents were satisfied with cleanliness (88%) and comfort (83%). Ninety-two per-cent of parents wanted playing area for their children. 74% of parents were dissatisfied with the fact that the waiting area was used by both preoperative and postoperative patients.

Third group of questions were about staff care. Satisfaction about quality of patient care was 91%, about nursing care was 100%, about receiving information about procedures was 70%, about their questions being answered satisfactorily was 80%.

The fourth group of questions was about patients' problems. Satisfaction with waiting times before surgery was 68%, adequate control of pain 83% and nausea-vomiting 84%, fasting period 58%. However, parents of children aged between 0-12 months were more dissatisfied (63,6%) with fasting period.

Ninetyseven per-cent of parents stated that, if given a choice they would opt for day surgery for their child again.

In the open ended questions parents emphasized that they wanted more information from doctors and better physical conditions.

In families with low maternal education levels, the degree of satisfaction with the preoperative information given by the surgeon and waiting area arrangements was higher than the families with high parental education levels ($p<0.05$).

Discussion

Increasing numbers of day surgery cases are being scheduled in most countries. Expansion of day surgery is now widely recommended and supported by healthcare professionals. Any further growth of day surgery, however, will be strongly influenced by consumer attitudes; this is an important outcome measure and the views of patients are increasingly sought on it⁶.

Day case surgery is generally regarded positively by parents, children and the doctors involved, and is therefore indispensable for the daily routine in the hospital. A further advantage of day case surgery is the supposition that these children will not display behavioral disturbances, in contrast to those children who are hospitalized longer⁷. Significantly less psychological disturbance is reported in children undergoing day-case surgery compared with children admitted on the day before and discharged on the day after surgery⁸. Overnight stay in hospital may frequently be associated with separation of children from parents which is distressing and disturbing to both⁹.

Only 64% of parents were visited by an anesthetist before the operation. 64% of the parents who met their anesthetist were satisfied while satisfaction with their surgeon was 88%.

The physical premises are very important in day-case surgery units. Ideally, separate secretarial services, a waiting room, operating rooms, and a recovery area are desirable. To make the entire process function smoothly, personnel and facilities should be designated solely for outpatients. Secretaries, clerks, nurses, and physicians who have an understanding of the special needs of the outpatient tend to provide unique care that is frequently not possible when outpatients are mixed with inpatients. Playrooms for both preoperative pediatric patients and those recovering after surgery make the environment more comfortable. Facilities for progressive care and feeding should also be available¹⁰.

We have shortcomings in our premises where parents were most dissatisfied. In our day-case surgery unit we have a separate secretarial service, a waiting room, recovery area which is also used as a premedication area, where pre and postoperative patients meet. We need a playroom and separate areas for preoperative and postoperative patients.

Parents were most satisfied with nursing care. The fact that the questionnaire was given to parents by nurses might have contributed to this.

With many parents, complaints arose due to the long waiting and fasting periods between admission in the morning and commencement of

surgery. In order to reduce the unnecessarily long waiting and fasting periods and to guarantee the sequence of day case surgical procedures, demands considerable organizational effort. Children should be operated at scheduled times as late as possible before surgery would begin⁷. In our institution a common starvation regimen is used as; 6-8h for formula or solids, 2-3h for clear fluids (includes water, carbonated drinks, black tea). But sometimes because organization problems waiting and fasting times are prolonged.

It has been claimed that parents' satisfaction is based firmly on their expectations and that those expectations vary substantially as a function of background and demographic factors¹¹. Variability in parental expectations may explain higher satisfaction among those with low parental education levels. Lower parental education levels offering lower expectations, is a subject of another study.

In our study, parents were highly satisfied with overall care. Ninetyseven per-cent of parents stated that, if given a choice they would opt for day surgery for their children again. This finding supports other studies; in Tönz et al, 98%, Hicklin et al, 87%, Callanon et al, 70%^{6,12,13}.

In summary, there is a high rate of satisfaction with day case surgery. However, considerable effort is needed to prepare better physical conditions, better time schedule organizations, more anesthesia outpatient clinic consultations. Improvements in these areas should result in further enhancement of parental satisfaction.

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