

## **Parental Satisfaction in Pediatric Daycare Surgery**

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### **ABSTRACT**

**Background:** Pediatric surgery performed in a daycare unit has become the norm in the last few years. Children need special care in terms of psychological stress during the perioperative period<sup>1</sup>. There are many ways to reduce stress in children scheduled for surgery, including preoperative sedative premedication, induction of anesthesia in a familiar environment and “steal” induction in the mother’s arms<sup>2,3</sup>. It is important to consider parental satisfaction while delivering a healthcare service to children.

**Objective:** To assess the overall parental satisfaction throughout the patient’s journey, including the preoperative, intraoperative and the postoperative periods.

**Setting:** Daycare Unit, Department of Anesthesia, King Hamad University Hospital, Bahrain.

**Design:** A Prospective Study.

**Method:** Fifty parents were consented for the questionnaire-based study. Children of these parents were posted for different types of daycare surgery. The parents were asked to fill a form either in Arabic or English, before their children were discharged from the daycare ward. The parents were given an 11-point questionnaire<sup>4</sup>.

**Scoring these questions was based on their choice of 5 options including:** (1) strongly agree, (2) agree, (3) neutral, (4) disagree and (5) strongly disagree. Fifty parents had been included in the study. Patient’s CPR numbers and telephone numbers of the parents were recorded. Questions 7 and 11 demanded individual answers rather than box-ticking.

**Result:** “Strongly agree” and “agree” were taken as positive responses. The majority of parents answered positively to the questions asked. “Strongly disagree” and “disagree” were taken as negative responses. Neutral response was taken as a parent’s wish not to comment either positively or negatively.

**Conclusion:** The majority of the parents were in positive agreement with the questions asked. The majority of the parents were satisfied that the PAC clinic gave them enough information about the anesthetic. The majority of parents were also satisfied with the amount of pain relief given in the recovery room and in the day-care ward.

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## **INTRODUCTION**

In a questionnaire-based study conducted in the Royal Berkshire Hospital, it was concluded that parental satisfaction is an important outcome of quality of care delivered in the pediatric daycare unit<sup>5</sup>. The study also concluded that the nurses play a key role in maintaining a quality service and should therefore be involved in monitoring that service.

Daycare surgery is increasingly popular because it reduces the length of stay in the hospital by facilitating admission and discharge on the same day. At least 70% of procedures in the pediatric age group are performed as day cases<sup>6</sup>. The increase in daycare surgery has become possible as a result of the availability of shorter-acting anesthetic agents and analgesics. In addition, the use of nerve blocks such as penile blocks and caudal blocks per-operatively has become more commonplace for pain management. Proper selection of patients is of the utmost importance for daycare surgery and one of the important categories of the patients in daycare surgeries is the pediatric age group. These patients are commonly posted for tonsillectomy, adenotonsillectomy, circumcision, undescended testes, inguinal herniotomy and other similar short duration surgeries with minimal blood loss. Children are vulnerable to separation anxiety and associated perioperative stress.

In our hospital, we have a policy of child-friendly and parent-friendly management of the pediatric patient coming to theatre for surgery. The parent stays with the child until the child falls asleep. Anesthesia is always induced by inhalation to avoid placing a needle into a conscious child. When the child is transferred from theatre to the recovery room after surgery, the parent is called as quickly as possible to the recovery room to be with the child. In this manner, the child is awake without the presence of a parent for a minimum period of time. In addition, we place a large emphasis on good peri-operative analgesia in pediatric patients, with good intra-operative analgesia and with a rapid response to any complaint of pain expressed by the child in the recovery room.

The aim of this study is to assess the overall parental satisfaction throughout the patient's journey including the preoperative, intraoperative and the postoperative periods.

## METHOD

The parents of 50 patients below 10 years of age posted for daycare surgery were included in the study. The children were anesthetized by anesthetic gas inhalation in the presence of one parent. The parent left the induction room immediately when the child fell asleep. At the end of surgery, the child was transferred to the recovery room. The parent was called to the recovery room as soon as the anesthetist and recovery nurse were satisfied that the child had recovered from the anesthetic.

An eleven-point questionnaire was filled out by the parents just before their children were discharged from the daycare ward, see table 1. The questionnaire included the preoperative, intraoperative and postoperative periods. In response to each question, parents were requested to select one of the options on five-point score; the options were:

- strongly agree
- agree
- neutral
- disagree
- strongly disagree

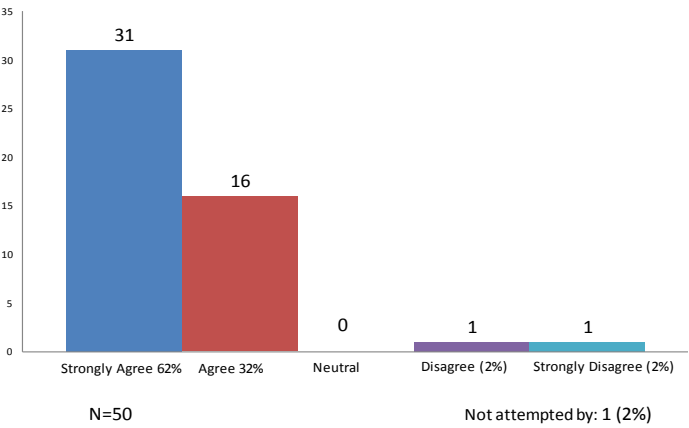
Identifying data on the questionnaire forms were the patient's Central Population Registration (CPR) number and the telephone number of their parents.

## RESULT

**Table 1: Parents' Responses Numbers and Percentages**

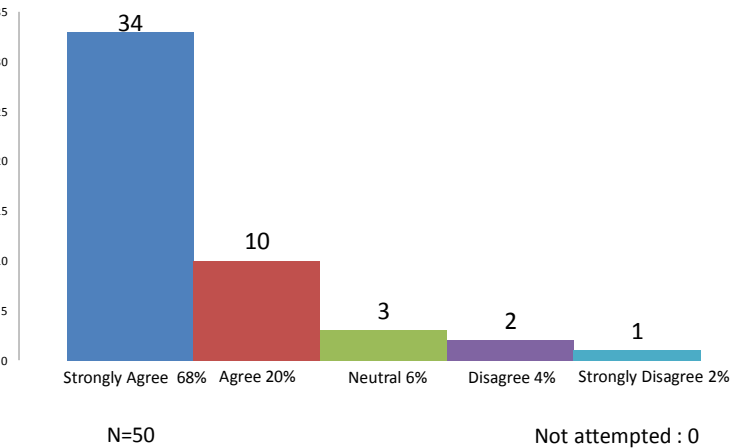
Question Number		Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree	Not Attempted
1	Was your visit to the pre admission Clinic helpful?	31	16	0	1	1	1
2	Are you satisfied that the doctor/anesthetist gave you enough information about the anesthetic for your child?	34	10	3	2	1	0
3	Did the doctor or anesthetist answer all your questions?	37	10	2	0	0	1
4	Did the doctor/anesthetist explain enough details about the anesthetic procedure?	31	13	2	3	0	1
5	Was it helpful for you to go to operating room with your child?	42	6	2	0	0	
6	If yes, was it helpful for your child?	39	9	1	0	0	1
7	Why was it helpful for your child?	Discussed below					
8	Were you called early enough to be with the child as he/she woke up in the recovery room?	39	9	0	0	1	1
9	Were you satisfied with the	40	8	1	0	0	1

	amount of pain relief given to your child in the recovery room?						
10	Were you satisfied with the amount of pain relief given to your child in the ward?	42	7	0	0	0	1
11	Do you have any suggestions as to how we can improve the anesthetic and Pain relief services for children?	Discussed below					



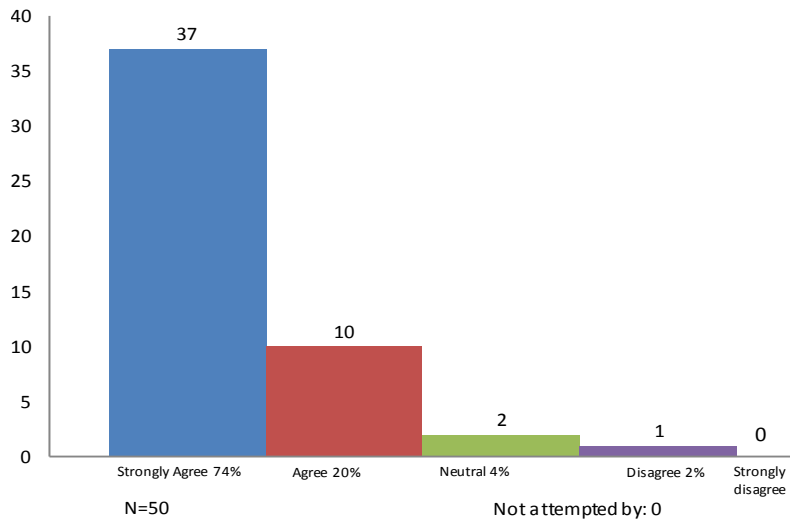
**Figure 1: Was Your Visit to the Pre-Admission Clinic Helpful?**

Thirty-one (62%) parents strongly agreed, 16 (32%) agreed, 1 (2%) disagreed and 1 (2%) strongly disagreed. One (2%) parent did not answer this question. Those who disagreed did not provide any specific reason for disagreeing. Cumulatively, 47 (94%) had a positive response.



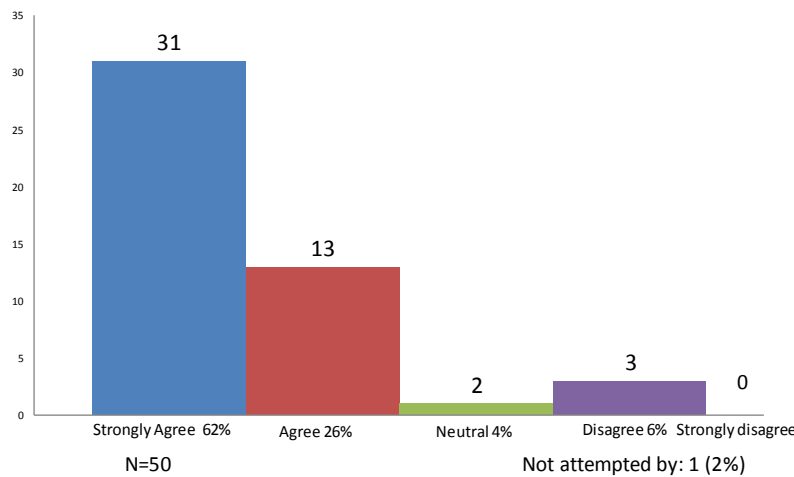
**Figure 2: Are You Satisfied with the Information Provided by the Anesthetist?**

Thirty-four (68%) parents strongly agreed, 10 (20%) agreed, 3 (6%) were neutral, 2 (4%) disagreed and 1 (2%) strongly disagreed. All parents answered the question. Cumulatively, 44 (88%) parents had positive response (strongly agree and agree).



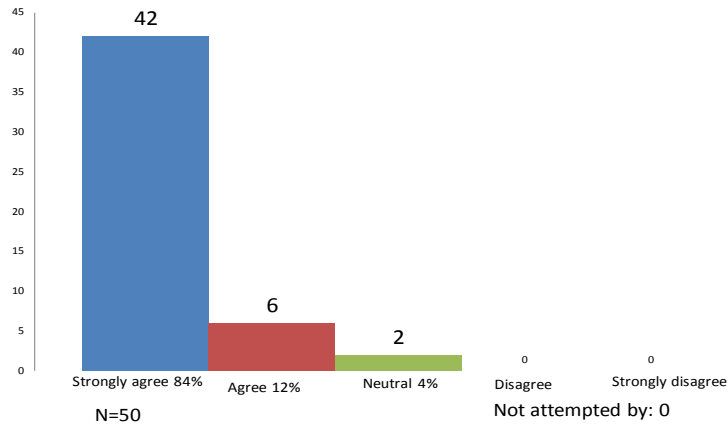
**Figure 3: Did the Anesthetist at the Clinic Answer All Your Questions?**

Thirty-seven (74%) parents strongly agreed, 10 (20%) agreed, 2 (4%) were neutral, 1 (2%) disagreed and none of the parents strongly disagreed. Cumulatively, 47 (94%) parents had positive response (strongly agree and agree).



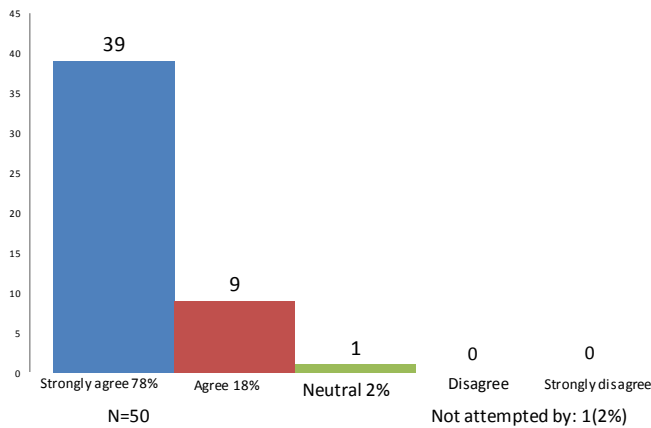
**Figure 4: Did the Anesthetist Explain in Detail about Anesthetic Procedure?**

Thirty-one (62%) parents strongly agreed, 13 (26%) agreed, 2 (4%) were neutral and 3 (6%) disagreed while none of the parents strongly disagreed. One (2%) of the parents did not answer the question. Cumulatively, 44 (88%) parents had positive response.



**Figure 5: Was It Helpful to Go to the Operating Room with Your Child?**

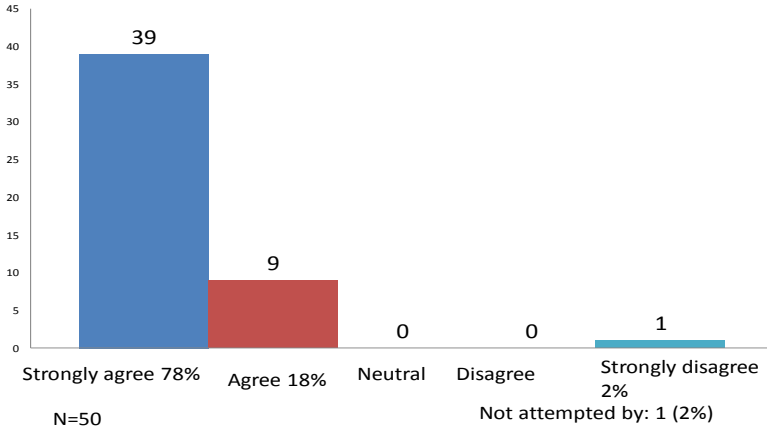
Forty-two (84%) parents strongly agreed, 6 (12%) agreed, 2 (4%) were neutral and none of them disagreed or strongly disagreed. The question was answered by all parents. Cumulatively, 48 (96%) parents had positive response.



**Figure 6: If Yes To Question 5, Was It Helpful for your Child?**

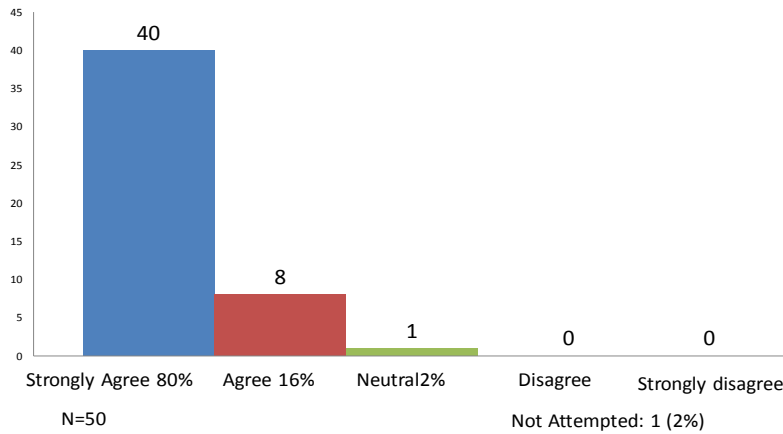
Thirty-nine (78%) parents strongly agreed, 9 (18%) agreed, 1 (2%) was neutral and none of them disagreed or strongly disagreed. One (2%) parent did not answer the question. Cumulatively, 48 (96%) had a positive response.

In response to question 7, which was about parents views on why was it helpful (to accompany their child while taking him/her to the operating room), most of the parents mentioned that the child felt safe, more relaxed, happy and comfortable.



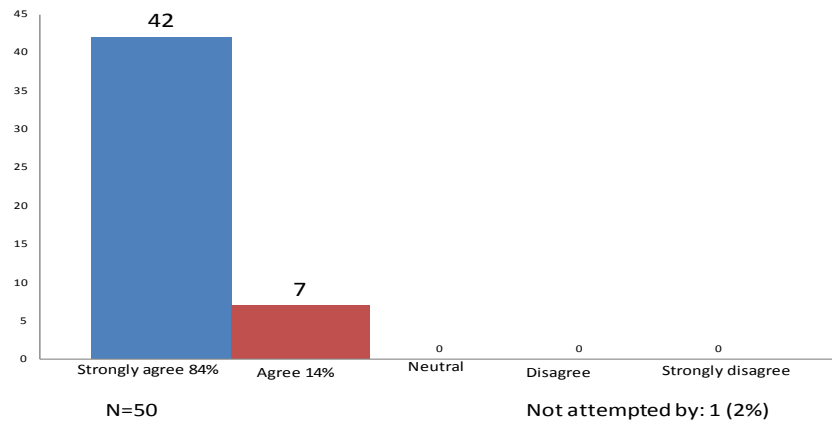
**Figure 7: Were You Called to be with the Child Early Enough in the Recovery Room?**

Thirty-nine (78%) parents strongly agreed, 9 (18%) agreed and 1 (2%) strongly disagreed, the reason was not mentioned. None of the parents were neutral or disagreed and one parent (2%) did not answer the question. Cumulatively, 48 (96%) of parents had positive response.



**Figure 8: Were You Satisfied with the Amount of Pain Relief Given to Your Child in the Recovery Room?**

Forty (80%) parents strongly agreed, 8 (16%) agreed and 1 (2%) was neutral. One (2%) parent did not answer the question. Cumulatively, 48 (96%) of parents had positive response.



**Figure 9: Were You Satisfied with the Pain Relief Given to Your Child in the Ward?**

Forty-two (84%) parents strongly agreed, 7 (14%) agreed and one (2%) did not answer the question. None of the parents was neutral, disagreed or strongly disagreed. Cumulatively, 49 (98%) parents were satisfied with the amount of pain relief in the ward.

Question 11 was about improvements in the anesthetic and pain relief services for children in daycare. Most of the parents who were positive either did not comment or they were happy with the services provided but there were a few positive suggestions for improvements. One of the parents suggested the provision of a separate anesthesia induction room for children rather than in the operation theatre.

## DISCUSSION

Daycare surgery is an integral part of hospital care in most institutions nowadays. This is beneficial because of lower costs, reduced psychological trauma to both parents and children and rapid recuperation<sup>7</sup>.

In a questionnaire-based study measuring parental satisfaction with pediatric day surgery at Tayside Children's Hospital, it was concluded that the recovery from pediatric day surgery was rapid and the overall parental satisfaction was high<sup>8</sup>.

In a similar retrospective study involving 100 parents at the Mayday University Hospital in Surrey, it was found that 96% of parents were happy with the treatment their child received during daycare surgery<sup>9</sup>.

Preparation for pediatric daycare anesthesia starts at the preoperative assessment clinic (PAC) where patients are first seen and examined by the anesthetist. Pediatric cases are always accompanied by their parents while visiting the PAC. At the clinic, parents are given an explanation about any concerns they might have related to the planned anesthesia and surgery. Any worries the parents may have are addressed at this stage.

Most of the parents in our study were satisfied in terms of better understanding of the plan of care, the response to their questions from the anesthetist, their presence with the children at



induction of anesthesia and their prompt attendance in the recovery room as soon as their children woke up. In addition, the parents were also satisfied with the amount of analgesia given to their children in the recovery room and the ward.

In response to the question of why accompanying the children was helpful, most of the parents mentioned the children's comfort, using words such as "reassurance", "feeling no stress", "better perioperative care" and "quick delivery of analgesia" in the recovery room and ward.

Six parents responded negatively to one of the questions asked in the questionnaire form. These parents were reassessed at the end of study period. Two parents did not find the PAC visit satisfactory, but for this, they did not mention any reason. Two parents felt that the amount of information provided to them during PAC visit was not enough and more detailed information should have been given regarding anesthetic plan for their children. Two out of six parents were concerned about more accurate timing of the scheduled surgical procedure so that the preoperative fasting period could be optimized.

The lesson we learned from this is that we can improve in certain areas including better delivery of information to the parents about anesthetic plan for their children, most optimal fasting time before operative procedure and more accurate timing of scheduled operative procedure.

## **CONCLUSION**

**Parents were satisfied that the anesthetist, at the preoperative consultation answered their questions regarding the anesthesia management of their child. The majority of parents were satisfied that they were allowed to accompany their child to the operating room and to remain with them until the child was anesthetized because their child was relaxed and happy. The parents were satisfied with the amount of pain relief given to their child in the recovery room and in the daycare ward.**

**In the majority of cases, we achieved a child-friendly and parent-friendly approach to the management of children undergoing anesthesia and surgery.**

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**Competing Interest:** None. **Sponsorship:** None.

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