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Original Article

Child and/or Guardian Satisfaction With Pediatric Anesthesia Services and Understanding of Enhanced Recovery After Surgery Protocols at Srinagarind Hospital

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Abstract

Background: Pediatric anesthesia presents unique challenges requiring specialized expertise in managing both patient care and parental anxiety. Patient satisfaction has become a crucial quality indicator in anesthesia services, with satisfaction rates varying from 78% to over 95%. Enhanced recovery after surgery (ERAS) protocols have shown improved perioperative outcomes, but require significant patient education. However, most studies have been conducted in Western settings, with limited data from Southeast Asian healthcare contexts.

Objectives: To assess satisfaction with pediatric anesthesia care among children and their guardians at Srinagarind Hospital, while also evaluating their understanding of ERAS protocols.

Methods: A descriptive cross-sectional study collected data from 103 children/guardians between September 2024 to October 2024 using questionnaires with 4-point Likert scales. High satisfaction or understanding was defined as scores 3 to 4, and low satisfaction or understanding as 1 to 2.

Results: Respondents were predominantly female (87.4%) and aged 31 to 40 years (43.7%). General anesthesia was used in 94.2% of cases. Full satisfaction (100%) was reported for preoperative, intraoperative, and postanesthesia care unit services, with mean (SD) overall satisfaction scores of 3.96 (0.05), 3.99 (0.01), and 3.99 (0.01), respectively. Ward follow-up satisfaction reached 96.8%, with mean (SD) overall satisfaction scores of 3.88 (0.01). ERAS protocol understanding varied, with mean (SD) overall understanding score of 3.07 (0.79); high for fasting guidelines (99.0%), low for thrombosis prophylaxis (22.3%), and smoking cessation (23.3%).

Conclusions: While child/guardian satisfaction with anesthesia services was excellent, particularly during perioperative periods, targeted improvements in ERAS education are recommended, especially regarding thrombosis prophylaxis and lifestyle modifications.

Keywords: Patient satisfaction, Anesthesia service, Pediatric anesthesia, ERAS program

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Introduction

Pediatric anesthesia represents a distinct challenge in healthcare, requiring specialized expertise due to anatomical, physiological, and pharmacological differences from adults.[1] The complexity extends beyond technical skills to managing parental anxiety and ensuring

effective communication with families.[2] Recent studies have shown that parental anxiety significantly impacts pediatric perioperative outcomes, highlighting the importance of comprehensive preoperative preparation.[3, 4]

Patient satisfaction has emerged as a crucial quality indicator in healthcare delivery, particularly in anesthesia services.[5] An integrative review by Albalushi et al[6] identified key determinants of satisfaction including preoperative information, provider communication, and postoperative pain management. Studies from various healthcare settings demonstrate that satisfied parents are more likely to comply with postoperative instructions and report better pediatric recovery outcomes.[7, 8]

The implementation of enhanced recovery after surgery (ERAS) protocols has revolutionized perioperative care, showing improved outcomes across various surgical specialties.[9] The protocols include: basic anesthesia/surgery knowledge, exercise/rehabilitation before surgery, control of underlying diseases, smoking/alcohol cessation, breathing exercise, fasting guidelines, preoperative glucose intake, pain management information, postoperative nausea/vomiting (PONV) prevention, deep vein thrombosis (DVT) prophylaxis, and postoperative mobilization. In a meta-analysis study by Su et al[10] in pediatric settings, ERAS protocols have demonstrated shorter length of stay and faster recovery, although their successful implementation requires significant parent education and engagement.[11]

Previous satisfaction studies in pediatric anesthesia have reported varying results, with satisfaction rates ranging from 78% to more than 95%.[12, 13] However, most studies were conducted in Western healthcare settings, with limited data from Asian contexts. Cultural differences in healthcare expectations and parent-provider relationships may influence satisfaction levels.[14, 15]

Srinagarind Hospital, a major tertiary-care center in northeastern Thailand, provides comprehensive pediatric anesthesia services, managing approximately 1300 cases annually. Regular assessment of patient satisfaction is essential not only for quality improvement, but also for hospital accreditation requirements.[16, 17] Understanding parent satisfaction and ERAS protocol comprehension can guide service improvements and enhance patient outcomes.[13, 17]

This study aimed to evaluate child/guardian satisfaction with pediatric anesthesia services and assess understanding of ERAS protocols at Srinagarind Hospital, thereby addressing a significant gap in the literature regarding pediatric anesthesia satisfaction in Southeast Asian healthcare settings. The primary objective was to assess child/guardian satisfaction with anesthesia services across perioperative stages, and the secondary objective was to assess understanding of the ERAS protocols.

Methods

This descriptive cross-sectional study was approved by the Khon Kaen University Ethics Committee in Human Research on 12 July 2023 (HE661282) and was conducted at Srinagarind Hospital, Khon Kaen University. As this was a descriptive cross-sectional study, it did not perform a formal sample size calculation. Instead, all consecutive eligible patients who provided informed consent from their guardians were enrolled during the 2-month study period, from September 2024 to October 2024.

The study enrolled elective cases with ages under 18 years who received anesthesia services. It excluded emergency cases, American Society of Anesthesiologists (ASA) class 3 and 4 patients, and those with communication difficulties or cognitive impairment.

All participants underwent a preoperative visit during which information and instructions on perioperative management were provided. Also, the ERAS protocol — its processes and expected benefits for postoperative recovery — was also explained. Data were collected, 1 day after surgery, via face-to-face interviews conducted by anesthesia residents or nurses with patients or, when appropriate, their guardians, provided they were able to understand and cooperate. The guardians were defined as legal guardians, parents, grandparents, primary caregivers, or close relatives who served as the child's primary caregivers in the absence of parents. Because most young children cannot reliably comprehend or participate in interviews, guardians' responses were used as proxies for the children's responses.

Data collection utilized a 4-part standardized questionnaire, developed by the research team and validated by a senior pediatric anesthesiologist, covering demographics, clinical characteristics, satisfaction assessment, and understanding of the ERAS protocol. Satisfaction and understanding were measured using a 4-point Likert scale (4 = most satisfied, 3 = satisfied, 2 = dissatisfied, and 1 = most dissatisfied), with high satisfaction or understanding defined as scores 3 to 4. The questionnaire was pilot-tested in 10 pediatric patients and their guardians, demonstrating good internal reliability with a Cronbach α coefficient of 0.89. Descriptive statistics were used. Categorical variables were presented as frequencies and percentages. The satisfaction and understanding rates were defined as the proportion of respondents reporting high satisfaction. Satisfaction scores were summarized as mean (SD) based on all valid responses. Data were analyzed using SPSS version 27.0 (IBM SPSS Statistics for Windows, Version 27.0. Armonk, NY: IBM Corp; 2020).

Results

This study enrolled 103 children and guardians of pediatric patients. The study population comprised predominantly female respondents (87.4%), with most aged 31 to 40 years (43.7%). Two participants were patients aged 17 years who demonstrated comprehension and responded clearly; the other respondents were guardians. Educational backgrounds included vocational certificates (43.7%), bachelor's degrees (26.2%), and below high school education (17.5%). Most cases were inpatients (79.6%), receiving general anesthesia (94.2%), with a small proportion receiving combined general/spinal anesthesia (5.8%) (Table 1).

Table 1. Baseline Demographics of Children/Guardians

Item	No. (%)
Gender	
Female	90 (87.4)
Male	13 (12.6)
Age, y	
17	2 (1.9)
18-30	23 (22.3)
31-40	45 (43.7)
41-50	22 (21.4)
51-60	10 (9.7)
61-70	1 (1.0)

Table 1. Baseline Demographics of Children/Guardians (Continued)

Item	No. (%)
Marital status	
Single	20 (19.4)
Married	74 (71.8)
Divorced/separated	9 (8.7)
Education level	
Below high school	18 (17.5)
Junior high school	2 (1.9)
Senior high school	5 (4.9)
Vocational diploma	45 (43.7)
Bachelor's degree	27 (26.2)
Above bachelor's degree	6 (5.8)
Occupation	
Student	1 (1.0)
Government officer	21 (20.4)
Farmer	23 (22.3)
Private employee	28 (27.2)
Business owner	18 (17.5)
Housewife	8 (7.8)
Unemployed	4 (3.9)
Relationship to patient	
Patients	2 (1.9)
Parents	88 (85.5)
Grandparents	10 (9.7)
Close relatives	3 (2.9)
Type of patient care	
OPD	21 (20.4)
IPD	82 (79.6)
Patient experience with anesthesia	
Yes	69 (67.0)
No	34 (33.0)
Type of anesthesia service	
GA	97 (94.2)
Spinal block	0
Combined GA and spinal block	6 (5.8)

Abbreviations: GA, general anesthesia; IPD, inpatient department; OPD, outpatient department.

Preoperative recognition of the anesthesia team reached 81.6%. All participants received pre/postanesthesia instruction, with mostly, 89.3%, from the anesthesia team. The level of understanding after instruction was high (74.8% with good and 23.3% with moderate) (Table 2).

Satisfaction analysis revealed that 94.2%-100.0% of participants were satisfied with pre/post general anesthesia instruction, procedure steps, complications, postoperative pain management, and participation in general anesthesia decision, with an overall mean (SD) satisfaction score of 3.84 (0.10) (Table 3).

All participants (100%) were satisfied with pre, intra, and postoperative care at the postanesthesia care unit (PACU), with overall mean (SD) satisfaction scores of 3.96 (0.05), 3.99 (0.01), and 3.99 (0.01), respectively. Ward follow-up satisfaction, analyzed from 93 responses (90.3%) (10 missing), showed consistently high satisfaction (96.8%), with overall mean (SD) satisfaction scores of 3.88 (0.01) across postoperative visits, staff courtesy, and safety perception. Data completeness analysis showed no missing responses for any sections, except for 10 unanswered postoperative ward follow-up questions (9.7%), which were attributed to outpatient procedures, undergoing general anesthesia, not requiring inpatient admission (Table 4).

Understanding of ERAS protocols varied significantly, with an overall mean (SD) understanding score of 3.07 (0.79). Fasting guidelines (99.0%), basic anesthesia knowledge (96.1%), and preexisting disease control (89.3%) showed high comprehension levels. However, understanding was notably lower for DVT prophylaxis (22.3%), smoking cessation (23.3%), and breathing exercises (60.2%) (Table 5).

Table 2. Patient Response With Information Provided by Anesthesia Staff

Item	No (%)
Recognition of anesthesia team	
Recognized	84 (81.6)
Did not recognize	16 (15.5)
Uncertain	2 (1.9)
No response	1 (1.0)
Receipt of pre/postanesthesia instruction	
Received	103 (100.0)
Did not receive	0
Source of pre/postanesthesia instruction	
Anesthesia team	92 (89.3)
Ward staff	1 (1.0)
Anesthesia team and ward staff	1 (1.0)
Anesthesia team and medical student	1 (1.0)
Surgeon and anesthesia team	2 (1.9)
Surgeon, anesthesia team, and ward staff	3 (2.9)
Unknown	3 (2.9)

Table 2. Patient Response With Information Provided by Anesthesia Staff (Continued)	
Item	**No (%)**
Level of understanding after instruction	
Good understanding (76%-100%)	77 (74.8)
Moderate understanding (50%-75%)	24 (23.3)
Poor understanding (25%-49%)	1 (1.0)
Not understanding (< 25%)	1 (1.0)

Table 3. Information/Instruction From Anesthesia Team

Item	Level of Satisfaction						Mean (SD)
	Level 4, No.	Level 3, No.	Levels 3+4, %	Level 2, No.	Level 1, No.	Levels 1+2, %	
Pre/post GA instruction	95	8	100.0	0	0	0	3.92 (0.27)
GA procedure steps	100	2	99.0	1	0	1.0	3.96 (0.24)
GA complications	87	10	94.2	3	3	5.8	3.76 (0.65)
Postoperative pain management	87	10	94.2	3	3	5.8	3.76 (0.65)
Participation in GA decision	92	6	95.1	0	5	4.9	3.80 (0.68)
Overall satisfaction	NA	NA	NA	NA	NA	NA	3.84 (0.10)

Abbreviations: GA, general anesthesia; NA, not applicable.

Table 4. Satisfaction With Perioperative Anesthesia Care

Item	Level of Satisfaction						Mean (SD)
	Level 4, No.	Level 3, No.	Levels 3+4, %	Level 2, No.	Level 1, No.	Levels 1+2, %	
Preoperative care (n = 103)							
Staff self-introduction/courtesy/ attentiveness	102	1	100.0	0	0	0	3.99 (0.10)
Empathetic care/good relationships	101	2	100.0	0	0	0	3.98 (0.14)
Respect for privacy/rights	100	3	100.0	0	0	0	3.97 (0.17)
Clear explanation of procedures	99	4	100.0	0	0	0	3.96 (0.19)
Attention to illness/gentle care	101	2	100.0	0	0	0	3.98 (0.14)
Staff knowledge/problem-solving ability	101	2	100.0	0	0	0	3.98 (0.14)
Opportunity for family questions	100	3	100.0	0	0	0	3.97 (0.17)
Involvement in decision-making	100	3	100.0	0	0	0	3.97 (0.17)
Service options availability	86	17	100.0	0	0	0	3.84 (0.37)
Overall satisfaction	NA	NA	NA	NA	NA	NA	3.96 (0.05)

Table 4. Satisfaction With Perioperative Anesthesia Care (Continued)

Item	Level of Satisfaction						Mean (SD)
	Level 4, No.	Level 3, No.	Levels 3+4, %	Level 2, No.	Level 1, No.	Levels 1+2, %	
Intraoperative care (n = 103)							
Staff courtesy and demeanor	102	1	100.0	0	0	0	3.99 (0.10)
Attention to care/gentle handling	102	1	100.0	0	0	0	3.99 (0.10)
Feeling of safety	101	2	100.0	0	0	0	3.98 (0.14)
Overall satisfaction	NA	NA	NA	NA	NA	NA	3.99 (0.01)
Postoperative care at PACU (n = 103)							
Staff courtesy and demeanor	102	1	100.0	0	0	0	3.99 (0.10)
Attention to care/gentle handling	102	1	100.0	0	0	0	3.99 (0.10)
Feeling of safety	101	2	100.0	0	0	0	3.98 (0.14)
Overall satisfaction	NA	NA	NA	NA	NA	NA	3.99 (0.01)
Postoperative visit by anesthesia team at ward (n = 93)*							
Postoperative visits	88	2	96.8	0	3	3.2	3.88 (0.55)
Staff courtesy	88	2	96.8	0	3	3.2	3.88 (0.55)
Feeling of safety	87	3	96.8	0	3	3.3	3.87 (0.56)
Overall satisfaction	NA	NA	NA	0	NA	NA	3.88 (0.01)

Abbreviations: NA, not applicable; PACU, postanesthesia care unit.

* Ten outpatient (OPD) respondents did not answer this question.

Table 5. Understanding of Enhanced Recovery After Surgery Program Components

Item	Level of Satisfaction						Mean (SD)
	Level 4, No.	Level 3, No.	Levels 3+4, %	Level 2, No.	Level 1, No.	Levels 1+2, %	
Basic anesthesia/surgery knowledge	91	8	96.1	2	2	3.9	3.83 (0.55)
Exercise/rehabilitation before surgery	43	43	83.5	6	11	16.5	3.15 (0.94)
Control of underlying diseases	73	19	89.3	3	8	10.7	3.52 (0.88)
Smoking/alcohol cessation	20	4	23.3	2	77	76.7	1.68 (1.21)
Breathing exercises	20	42	60.2	13	28	39.8	2.52 (1.09)
Fasting guidelines	99	3	99.0	0	1	1.0	3.94 (0.34)
Preoperative glucose intake.	77	11	85.4	4	11	14.6	3.50 (0.99)
Pain management information	74	17	88.3	3	9	11.7	3.52 (0.92)
PONV prevention	54	36	87.4	9	4	12.6	3.36 (0.80)
DVT prophylaxis	15	8	22.3	2	78	77.7	1.61 (1.13)
Postoperative mobilization	69	15	81.6	1	18	18.4	3.31 (1.14)
Overall understanding	NA	NA	NA	NA	NA	NA	3.07 (0.79)

Abbreviations: DVT, deep vein thrombosis; ERAS, enhanced recovery after surgery; NA, not applicable; PONV, postoperative nausea/vomiting.

Discussion

This study evaluated patient satisfaction with anesthesia care at Srinagarind Hospital and assessed understanding of the ERAS protocol among 103 pediatric patients and their guardians. The results demonstrated high overall satisfaction across all perioperative phases, with some opportunities for improvement in preoperative patient education.

Demographic characteristics showed a predominance of female respondents (87.4%), with the majority being guardians (98.1%), across a wide age range, and most being inpatients (79.6%). This suggests the findings may broadly represent the pediatric patient population and their families' perspectives.

Recognition of and satisfaction with the anesthesia team was high, with 81.6% of respondents able to identify the anesthesia providers. Importantly, all participants reported receiving pre and postanesthesia instructions, predominantly from the anesthesia staff (89.3%), with most (74.8%) expressing a good understanding of the information provided. This aligned with previous studies which have emphasized the importance of preoperative education and provider-patient communication in enhancing satisfaction.[18, 19]

Satisfaction with specific aspects of anesthesia information and care was consistently high, particularly regarding overall pre and postoperative instructions (100% levels 3+4 satisfaction). However, lower ratings were observed for information about anesthesia complications (94.2%) and postoperative pain management (94.2%), suggesting potential areas for improvement in preoperative counseling.

The results indicate excellent patient satisfaction across all perioperative phases. Preoperative care, including staff courtesy, empathy, respect for privacy, and clear communication, received 100% levels 3+4 satisfaction ratings. This trend continued in the intraoperative and PACU settings, with all measured aspects of care achieving 100% levels 3+4 satisfaction. This high level of perioperative satisfaction exceeds the findings of Shafer et al, which reported an overall perioperative satisfaction rate of 94.7%, in a similar surgical population.[20]

Ward follow-up satisfaction (96.8%) compares favorably to international benchmarks.[21] However, there were 10 missing responses; all received general anesthesia, and due to the outpatient surgery status of these cases, they did not require ward admission. This finding suggests the need for modified follow-up strategies tailored to outpatient populations. Implementing alternative methods, such as telephone or online surveys, could help capture the experiences and satisfaction of patients who do not have a postoperative ward stay. Additionally, providing clear written instructions and contact information for the anesthesia team at discharge could facilitate communication and address any concerns that may arise after leaving the hospital. Future research should explore the specific needs and preferences of outpatient surgery patients and their families to develop effective follow-up protocols that ensure continuity of care and patient satisfaction across all surgical settings.

The consistently high satisfaction scores in this study likely reflected the anesthesia department's strong emphasis on patient-centered care, effective communication, and teamwork across all perioperative stages. Regular staff training and adherence to evidence-based protocols may also contribute to these exemplary results. Cultural factors could also play a role, as Asian healthcare settings often report higher satisfaction levels compared to their Western counterparts, possibly due to differing expectations and doctor-patient relationship dynamics.[22-24] However, the potential for response bias in our survey cannot be excluded, as patients may be reluctant to express dissatisfaction in face-to-face interviews. Future studies using validated instruments and alternative data

collection methods could provide a more nuanced understanding of the factors driving perioperative satisfaction in this setting.

Notable gaps were identified in patients' understanding of certain ERAS components. While basic anesthesia knowledge (96.1%), fasting guidelines (99.0%), and postoperative nausea/vomiting prevention (87.4%) were well understood, other elements showed room for improvement. Exercise/rehabilitation (83.5%), breathing exercises (60.2%), and postoperative mobilization (81.6%) had lower levels 3+4 understanding rates. Strikingly, smoking/alcohol cessation and DVT prophylaxis had the lowest levels 3+4 understanding at 23.3% and 22.3%, respectively. This disparity suggests the need for targeted educational interventions, particularly for complex ERAS elements. Providing simplified, accessible information through multiple modalities (eg, verbal, written, and visual) may help to improve patient comprehension and engagement. Additionally, involving family members and guardians in the education process could reinforce key concepts and promote adherence to the ERAS protocols. Future studies should explore the most effective strategies for delivering ERAS education in pediatric surgical populations, taking into account developmental stages, health literacy levels, and cultural factors.

Previous studies have shown that structured preoperative education can significantly improve patients' understanding of and adherence to ERAS protocols, leading to better outcomes. Strategies such as multimedia presentations, interactive sessions, and individualized counseling have proven effective in increasing patient knowledge and engagement.[25]

Several limitations warrant consideration. First, the exclusion of emergency cases may have introduced selection bias, as the satisfaction and understanding of ERAS protocols among patients undergoing urgent or emergent procedures may differ from those of elective cases. Second, the single-center design limits the generalizability of the findings to other healthcare settings, particularly those with different patient populations, resources, and anesthesia practices. Third, social desirability bias may have influenced satisfaction ratings, particularly given the cultural context in which patients may be reluctant to express dissatisfaction or criticism. This bias could have been exacerbated by the face-to-face interview format, which might have made participants more likely to provide positive responses. Future research should address these limitations through multicenter studies that include a more diverse range of surgical cases and patient populations. Additionally, employing mixed-method approaches that combine quantitative surveys with qualitative interviews or focus groups could provide a more comprehensive understanding of patient satisfaction and the factors influencing ERAS protocol understanding. Qualitative data may also help identify potential barriers to effective patient education and inform the development of targeted interventions to improve ERAS knowledge and adherence. By prioritizing patient-centered care and continually refining perioperative education, healthcare providers can optimize the surgical experience for children and their families.

Conclusions

This study demonstrated high satisfaction with pediatric anesthesia services at Srinagarind Hospital, reflecting a strong commitment to patient-centered care. However, it also highlighted opportunities to enhance preoperative education, particularly regarding ERAS protocols. Targeted interventions using age-appropriate materials and engaging family members could improve patient understanding and adherence to evidence-based practices, leading to better outcomes and satisfaction.

Additional Information

Ethics Approval: This study was approved by the Khon Kaen University Ethics Committee in Human Research (HE661282 on 12 July 2023).

Clinical Trial Consideration: This study does not report on a clinical trial.

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Conceptualization: All authors
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References

1. Sbaraglia F, Cuomo C, Della Sala F, et al. State of the art in pediatric anesthesia: a narrative review about the use of preoperative time. *J Pers Med.* 2024;14(2):182. doi:10.3390/jpm14020182
2. Frosch CA, Schoppe-Sullivan SJ, O'Banion DD. Parenting and child development: a relational health perspective. *Am J Lifestyle Med.* 2019;15(1):45-59. doi:10.1177/1559827619849028
3. Ferreira J, Safa N, Botelho F, et al. The impact of educational materials on parental anxiety and productivity: a clinical trial in pediatric appendicitis. *J Pediatr Surg.* 2024;59(5):804-809. doi:10.1016/j.jpedsurg.2024.01.022
4. Santapuram P, Stone AL, Walden RL, Alexander L. Interventions for parental anxiety in preparation for pediatric surgery: a narrative review. *Children.* 2021;8(11):1069. doi:10.3390/children8111069
5. Naeem B, Nasim J, Anwar A, et al. Assessment of parental satisfaction with paediatric health services in public sector tertiary hospitals within a low-income setting using patient satisfaction questionnaire (PSQ-18). *BMJ Paediatr Open.* 2024;8(1):e002418. doi:10.1136/bmjpo-2023-002418
6. Albalushi S, Khraim F, Al-Tawafsheh AMM, Forgrave D. Effect of pre-operative education on post-operative pain management among adult patients undergoing elective surgery: an integrative review. *Journal of Perioperative Nursing.* 2023;36(2):42-52. doi:10.26550/2209-1092.1246
7. Kain A, Mueller C, Golianu BJ, Jenkins BN, Fortier MA. The impact of parental health mindset on postoperative recovery in children. *Paediatr Anaesth.* 2021;31(3):298-308. doi:10.1111/pan.14071
8. Nascimento LC, Warnock F, Pan R, et al. Parents' participation in managing their children's postoperative pain at home: an integrative literature review. *Pain Manag Nurs.* 2019;20(5):444-454. doi:10.1016/j.pmn.2018.12.002
9. Jain SN, Lamture Y, Krishna M. Enhanced recovery after surgery: exploring the advances and strategies. *Cureus.* 2023;15(10):e47237. doi:10.7759/cureus.47237
10. Su Y, Xu L, Hu J, Musha J, Lin S. Meta-analysis of enhanced recovery after surgery protocols for the perioperative management of pediatric colorectal surgery. *J Pediatr Surg.* 2023;58(9):1686-1693. doi:10.1016/j.jpedsurg.2022.11.017
11. Roberts K, Brindle M, McLuckie D. Enhanced recovery after surgery in paediatrics: a review of the literature. *BJA Educ.* 2020;20(7):235-241. doi:10.1016/j.bjae.2020.03.004
12. Milliken-Glabe SJ, Zuk J, Ziniel SI, et al. First steps in validating the pediatric anesthesia parent satisfaction (PAPS) survey. *Paediatr Anaesth.* 2017;27(2):153-161. doi:10.1111/pan.13053

13. Admass BA, Hailemariam AS, Agegnehu AF, Getahun AB. Parental satisfaction and associated factors toward their child's anesthesia service at a comprehensive specialized referral hospital in Ethiopia, 2021: a cross-sectional study. *Front Pediatr.* 2022;10:849969. doi:10.3389/fped.2022.849969
14. Bettenhausen JL, Colvin JD, Berry JG, et al. Association of income inequality with pediatric hospitalizations for ambulatory care-sensitive conditions. *JAMA Pediatr.* 2017;171(6):e170322. doi:10.1001/jama pediatrics.2017.0322
15. Jonas JA, Shah SS, Zaniletti I, et al. Regional variation in standardized costs of care at children's hospitals. *J Hosp Med*. 2017;12(10):818-825. doi:10.12788/jhm.2829
16. Andres EB, Song W, Song W, Johnston JM. Can hospital accreditation enhance patient experience? longitudinal evidence from a Hong Kong hospital patient experience survey. *BMC Health Serv Res.* 2019;19(1):623. doi:10.1186/s12913-019-4452-z
17. Alhawajreh MJ, Paterson AS, Jackson WJ. Impact of hospital accreditation on quality improvement in healthcare: a systematic review. *PLoS One.* 2023;18(12):e0294180. doi:10.1371/journal.pone.0294180
18. Ali Z, Ahsan Z, Liaqat N, Din IU. Bridging the gap: evaluation of preoperative patients' education by comparing expectations and real-perioperative surgical experiences: a mixed-methods descriptive cross-sectional study. *BMC Health Serv Res.* 2024;24(1):964. doi:10.1186/s12913-024-11388-z
19. Calabro KA, Raval MV, Rothstein DH. Importance of patient and family satisfaction in perioperative care. *Semin Pediatr Surg*. 2018;27(2):114-120. doi:10.1053/j.sempedsurg.2018.02.009
20. Shafer JS, Jenkins BN, Fortier MA, et al. Parental satisfaction of child's perioperative care. *Paediatr Anaesth.* 2018;28(11):955-962. doi:10.1111/pan.13496
21. Kruszecka-Krówka A, Smoleń E, Cepuch G, Piskorz-Ogórek K, Perek M, Gniadek A. Determinants of parental satisfaction with nursing care in paediatric wards-a preliminary report. *Int J Environ Res Public Health.* 2019;16(10):1774. doi:10.3390/ijerph16101774
22. Betancourt JR, Corbett J, Bondaryk MR. Addressing disparities and achieving equity: cultural competence, ethics, and health-care transformation. *Chest*. 2014;145(1):143-148. doi:10.1378/chest.13-0634
23. Ye D, Ng YK, Lian Y. Culture and happiness. *Soc Indic Res.* 2015;123(2):519-547. doi:10.1007/s11205-014-0747-y
24. Flores G, Tomany-Korman SC. Racial and ethnic disparities in medical and dental health, access to care, and use of services in US children. *Pediatrics*. 2008;121(2):e286-e298. doi:10.1542/peds.2007-1243
25. Brodersen F, Wagner J, Uzunoglu FG, Petersen-Ewert C. Impact of preoperative patient education on postoperative recovery in abdominal surgery: a systematic review. *World J Surg.* 2023;47(4):937-947. doi:10.1007/s00268-022-06884-4