

A Review of Patient Satisfaction and Anaesthesia Services Literature: Mini-Review Approach

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Abstract

Anaesthesiologists have a variety of services with a variety of customers or patients. Still, most of the science is only on the basis of the assessment and the literature on certain objective results, such as nausea and vomiting, pain, hemodynamic. However, after undergoing anaesthesia, patient satisfaction has not been paid more attention and has not been comprehensively studied. It is very different from other industries, where customer satisfaction is the main point of activity in their activities. This paper attempts to provide an understanding of the literature on patient satisfaction with anaesthesia services in patients who have received anaesthesia service, where this literature has been collected from various related sources. This research is designed using a qualitative approach through literature study. Reviews of patient satisfaction with anaesthesia services were carried out by reading and analysing 30 peer-reviewed journal articles and summarised in two tables, namely journal articles and publisher distribution and article categories based on their subject. This study's findings are that patient satisfaction is a complex and multi-dimensional concept, which is influenced by several variables such as previous anaesthesia experience, techniques used, duration of procedures, respect for privacy, and communication. In conclusion, patient satisfaction with anaesthesia services can increase or decrease. Several factors can influence this, and these factors can be properly handled by creating awareness about the importance of customer satisfaction in service and conducting training to improve it in people who work in an anaesthetic environment, including anaesthetists.

Keywords

Patient satisfaction, anaesthesia services and mini-review approach

1. Introduction

In the competitive market era, the management needs to ensure service differentiation and create innovative strategies that allow long-term business performance (profit maximisation). In line with study employed by Suhail and Srinivasulu (2020), stated that the excellent service quality is one superior service strategy for the success of any business. It is similar to health business services, whereas the service quality is the most crucial factor in maintaining a business for the long-term. Barton et al. (2006) added that health quality service is one of the tools in modern medical services and necessary to fulfil society's needs. Thus, determining the quality service level to identify

customer satisfaction (in health sectors known as patient satisfaction). Lucadamo et al. (2019) suggest placing the user needs and expectations for the provided services, including the consequences of services process.

Numerous studies have done discussed patient satisfaction. However, the research that focuses on patient satisfaction in anaesthesia services still limited (Pozdnyakova, 2019; Galetin et al., 2018; Bae et al., 2018; Borishade et al., 2018). Besides that, there are gaps in measuring patient satisfaction, i.e. patient expectations and patient perceptions of events (Andemeskel et al., 2019). This study has identified several questions on patient satisfaction concerning various aspects of performance model-based care (SERVPERF). We then grouped these into five dimensions: tangibility, reliability, responsiveness, assurance, and empathy (Siraneh et al., 2020; Suhail and Srinivasulu, 2020; Mathew et al., 2020; Anaba et al., 2020; Lucadamo and Camminatiello, 2020). Also, the service quality indicator is subjective and complex. It depends on the patient's physical, emotional, mental, socioeconomic and cultural factors (Zauner et al., 2016). It makes the difficulty in making measurements and interpretations (Siraneh et al., 2020; Mathew et al., 2020; Burch et al., 2017). Thus, it is crucial to measure the anaesthesia satisfaction of patients due to the surgery process. Siraneh et al. (2020), Suhail and Srinivasulu (2020) believed that anaesthesia care is an attribute of quality of anaesthesia care, such as a balance of evaluation structure, process, and services results.

Anaesthetic treatment is not only for adult patients but also for children with various physical conditions. Adult patients can express needs and expectations for treatment and action. In contrast, children do not express it, so we must consider the treatment satisfaction for children health quality services in terms of parental satisfaction and experiences during the perioperative period (Mathew et al., 2020). Falco et al. (2017) have assessed the anaesthesia patient satisfaction perioperatively, i.e. during preparation services, during anaesthesia, before performing the anaesthesia and immediately after anaesthesia (Srivastava et al., 2020; Fiorentin et al., 2020; Baek et al., 2020; Siraneh et al., 2020; Sahin and Basak, 2019; Peeler et al., 2019; Pozdnyakova, 2019; Siu et al., 2019; Cakmak et al., 2018; Alsaif et al., 2018; Burch et al., 2017; Lozada et al. al, 2016). Health services quality can measure using the compensation for work plans, institutional policies, training for health care providers and documentation of monitoring activities, and key determinants of patient loyalty (Siraneh et al., 2020; Andemeskel et al., 2019). In line with the previous elaboration, this study aims to provide a comprehensive understanding of the literature on patient satisfaction with anaesthesia services.

2. Methods

This qualitative study uses a mini-review approach. We reviewed the relevant articles about patient satisfaction and anaesthesia services by reading through and analysing 30 peer-reviewed journal articles. These articles are summarised in the tables below. The first table presents the journal article's information regarding the title, authors, publishers, and publication year. The second table represents the journal articles' contents, including the study's objectives, the findings, and the recommendations.

Table 1. Journal and Publisher Distribution

No	Article Name	Author(s)	Journal	Publisher	Year
1	Perception of service quality, satisfaction, and behavioral intentions in Ayurveda healthcare	Suhail, Srinivasulu	Journal of Ayurveda and Integrative Medicine	Elsevier	2020
2	Patient satisfaction with perioperative nursing care in a tertiary hospital in Ghana	Anaba, Abuosi	International Journal of Health Care Quality Assurance	Emerald	2020
3	Patient satisfaction survey scores are not an appropriate metric to differentiate performance among anesthesiologists	Freundlich et al	Journal of Clinical Anaesthesia	Elsevier	2020

4	Factors Influencing Satisfaction with Patient-Controlled Analgesia Among Postoperative Patients Using a Generalised Ordinal Logistic Regression Model	Back et al	Asian Nursing Research	Elsevier	2020
5	Factors associated with patient satisfaction in perioperative anaesthesia care at Hawassa university comprehensive specialised hospital, Ethiopia. Cross-sectional study design	Siraneh et al	International Journal of Surgery Open	Elsevier	2020
6	Current practice of pre-anaesthesia preparation and perioperative parental satisfaction during paediatric ambulatory procedures in a developing country, An observational study	Mathew et al	Anaesthesia Critical Care & Pain Medicine	Elsevier	2020
7	Comparison of palonosetron-dexamethasone and ondansetron-dexamethasone for prevention of postoperative nausea and vomiting in middle ear surgery: a randomised clinical trial	Srivastava et al	Brazilian Journal of Anesthesiology	Elsevier	2020
8	Comparison between subarachnoid morphine and femoral nerve block for analgesia after knee ligament reconstruction: a randomised clinical trial	Fiorentin et al.	Brazilian Journal of Anesthesiology	Elsevier	2020
9	A statistical model for evaluating the patient satisfaction	Lucadamo, Camminatiello	Socio-Economic Planning Sciences	Elsevier	2020
10	The Effects of Intraoperative Progressive Muscle Relaxation and Virtual Reality Application on Anxiety, Vital Signs, and Satisfaction: A Randomized Controlled Trial	Sahin, Basak	Journal of PeriAnaesthesia Nursing	Elsevier	2019

11	Rationale and design of PASSAT patients' satisfaction with local or general anaesthesia in video-assisted thoracoscopic surgery: study protocol for a randomised controlled trial with a non-randomised side arm	Galetin et al.	Trials	creativecommons.org	2019
12	Patient satisfaction with peri-operative anaesthesia care and associated factors at two National Referral Hospitals: a cross sectional study in Eritrea	Andemeskel et al.	BMC Health Services Research	Springer Nature	2019
13	Patient Satisfaction with Oral versus Intravenous Sedation for Cataract Surgery	Peeler et al	The American Academy of Ophthalmology	Elsevier	2019
14	Factors Affecting Patient Satisfaction With Their Anesthesiologist: An Analysis of 51,676 Surveys From a Large Multihospital Practice	Pozdnyakova, Tung, Dutton	Anaesthesia & Analgesia	anaesthesia-analgesia.org	2019
15	Experience of operating an anaesthesia preoperative evaluation clinic in South Korea, An observational study of surgeons' satisfaction	Park et al.	Medicine	Wolters Kluwer Health	2019
16	Evaluation of the Determinants of Satisfaction With Postoperative Pain Control After Thoracoscopic Surgery: A Single-Center, Survey-Based Study	Siu et al	Anaesthesia & Analgesia	International Anaesthesia Research Society	2019
17	Determinants of women's dissatisfaction with anaesthesia care in labour and delivery	Yurashevich et al	Anaesthesia	Association of Anaesthetists	2019
18	A prospective study on elective surgical in patient satisfaction with perioperative anaesthesia service at Ayder comprehensive specialised hospital, Mekelle, Ethiopia	Benwu, Gebremedhin	BMC Anesthesiology	creativecommons.org	2019

19	A comprehensive analysis of patient satisfaction with anaesthesia	Sinbukhova and Lubnin	Saudi Journal of Anaesthesia	Wolters Kluwer - Medknow	2019
20	Preoperative predictors of patient satisfaction after carpal tunnel release	Bae et al	Orthopaedics & Traumatology	Elsevier	2018
21	Patient satisfaction and experience with anaesthesia: A multicenter survey in Saudi population	Alsaif et al	Saudi Journal of Anesthesi	Wolters Kluwer	2018
22	Factors associated with anesthetic satisfaction after cesarean delivery underneuraxial anaesthesia	Ida et al	JA Clinical Reports	Springer	2018
23	Effect of video-based education on anxiety and satisfaction of patients undergoing spinal anaesthesia	Cakmak et al	Revista Brasileira De Anestesiologia	Elsevier	2018
24	Dataset on customer experience and satisfaction in healthcare sector of Nigeria	Borishade et al	Data in Brief	Elsevier	2018
25	Postoperative Visual Analog Pain Scores and Overall Anaesthesia Patient Satisfaction	Burch et al	Crit Care Nurs Clin N Am	Elsevier	2017
26	Patient Satisfaction with Anaesthesia Care: What Do We Know?	Falco et al	AANA Journal	American Association of Nurse Anesthetists	2017
27	Postanaesthesia evaluation of emotional and psychological satisfaction in a Hispanic population	Zauner et al.	Pediatric Anaesthesia	John Wiley & Sons	2016
28	Patient reported outcome of adult perioperative anaesthesia in the United Kingdom: a cross-sectional observational study	Walker et al	British Journal of Anaesthesia	Oxford University Press	2016
29	Patient preference for the pre-anaesthesia evaluation: Telephone versus in-office assessment	Lozada et al.	Journal of Clinical Anaesthesia	Elsevier	2016
30	First steps in validating the Pediatric Anaesthesia Parent satisfaction (PAPS) survey	Milliken-Glabe et al.,	Pediatric Anaesthesia	John Wiley & Sons Ltd	2016

Table 2. Articles' Category Based on the Subject

No	Article Name	Objectives	Findings	Recommendations
1	Perception of service quality, satisfaction, and behavioral intentions in Ayurveda healthcare	To understand the perception differences of healthcare consumers in Ayurveda, by analysing the relationship between the service quality, satisfaction, and behavioural intentions in Ayurveda.	The perception of healthcare consumers varies for service quality and patient, satisfaction according to socioeconomic variables except for the education factor. Later the test on the impact of performance-based service quality on patient satisfaction and the mediation model showed a significant influence between the variables.	
2	Patient satisfaction with perioperative nursing care in a tertiary hospital in Ghana	To assess patient satisfaction with perioperative nursing care in Korle-Bu Teaching Hospital, the largest tertiary hospital in Ghana.	Patients in this study were satisfied with perioperative nursing care in KorleBu Teaching Hospital. Out of the five dimensions, nurse–patient relationship emerged as the only significant predictor of overall patient satisfaction with perioperative nursing care. However, the patients were dissatisfied with waiting time and pain management. Korle-Bu Teaching Hospital is a tertiary healthcare facility whose characteristics differ significantly from other health facilities such as regional and district hospitals.	Future studies should consider comparing urban and rural health facilities.
3	Patient satisfaction survey scores are not an appropriate metric to differentiate performance among anaesthesiologists	To determine whether an automated patient satisfaction survey could be effectively used to identify outlying anaesthesiologists.	Multiple factors impact patient satisfaction. There was very little information in patient satisfaction scores to discriminate the providers, after adjusting for confounding. While patient satisfaction scores may facilitate identification of extreme outliers among anaesthesiologists, there is no evidence that this metric is useful for the routine evaluation of individual provider performance.	

4	Factors Influencing Satisfaction with Patient-Controlled Analgesia Among Postoperative Patients Using a Generalised Ordinal Logistic Regression Model	To identify the factors affecting the satisfaction with patient-controlled analgesia (PCA)	Degree of postoperative pain and assessment interval are the most important factors associated with PCA satisfaction. Because the factors affecting PCA satisfaction were different for the two types of abdominal surgeries, customising PCA to individual patients may potentially improve pain management and consequently increase PCA satisfaction.	Future studies can use various environmental factors such as the amount and intensity of ambulation, side effects, and PCA usage.
5	Factors associated with patient satisfaction in perioperative anaesthesia care at Hawassa university comprehensive specialised hospital, Ethiopia. Cross-sectional study design	To assess the magnitude and associated factor of patient satisfaction towards anaesthesia care at Hawassa university comprehensive specialised hospital.	Patient satisfaction with perioperative anaesthesia care compared to another study magnitude of satisfaction very low. and predictors of perioperative patient dissatisfaction were general anaesthesia, duration of surgery, nausea, and vomiting, and pain after surgery	Future studies can consider intervention at every time to increase patient satisfaction.
6	Current practice of pre-anaesthesia preparation and perioperative parental satisfaction during paediatric ambulatory procedures in a developing country: An observational study	To assess the current practice of pre-anaesthesia preparation and perioperative parental satisfaction during paediatric ambulatory procedures in a developing country: An observational study	The study has shown that the present study revealed the high incidence of preoperative anxiety in children and highlighted the expectations of parents regarding preoperative preparation	Future studies can involve the existing preparatory program to tackle the high incidence of preoperative anxiety in children and factoring in parents' expectations and limitations inherent to the developing world setting.
7	Comparison of palonosetron-dexamethasone and ondansetron-dexamethasone for prevention of postoperative nausea and vomiting in middle ear surgery: a randomised clinical trial	To assess the effect of palonosetron-dexamethasone and ondansetron-dexamethasone combination for the prevention of postoperative nausea and vomiting in patients of middle ear surgery	The palonosetron-dexamethasone is more effective in the prevention of PONV with superior antiemetic efficacy in the first 24 hours compared to ondansetron-dexamethasone with decreased incidence of nausea, decreased requirement of rescue antiemetics and better patient satisfaction	Future studies can add a combination of palonosetron-dexamethasone for prophylaxis for PONV in middle ear surgeries.

8	Comparison between subarachnoid morphine and femoral nerve block for analgesia after knee ligament reconstruction: a randomised clinical trial	To compare the intensity of postoperative pain in these patients under different modalities of analgesia	There was no difference in the intensity of postoperative pain in patients submitted to ACL reconstruction with flexor tendons under the analgesic modalities evaluated, despite the predominance of urinary retention in the M group and motor block in the R0,375 group.	
9	A statistical model for evaluating patient satisfaction	To identify the drivers which affect patient satisfaction	Findings show that a policy that focuses on staff, competence, and staff's abilities and maintains high standards of listening and taking care of patients is the most appropriate strategy to improve patient satisfaction.	Future studies can improve by inserting items about socio-demographic characteristics - gender, age, qualification, etc. The response variable could be on Likert 7-point scale like the independent variables rather than dichotomous.
10	The Effects of Intraoperative Progressive Muscle Relaxation and Virtual Reality Application on Anxiety, Vital Signs, and Satisfaction: A Randomized Controlled Trial	To determine the effects of intraoperative progressive muscle relaxation (PMR) and the application of virtual reality (VR) on anxiety, vital signs, and satisfaction levels during a knee arthroscopy operation	The State-Trait Anxiety Inventory anxiety scale (STAI-S) scores were increased in all the three groups after the surgery. When the preoperative and postoperative STAI-S scores in the group were examined; intragroup STAI-S scores in the PMR and VR groups were statistically significant ($P < .05$). There was a significant difference between the control group and the PMR and VR groups in mean satisfaction scores ($P < .05$). The differences between blood pressure and pulse rate were statistically significant in the PMR and VR groups ($P < .05$).	

11	Rationale and design of PASSAT patients' satisfaction with local or general anaesthesia in video-assisted thoracoscopic surgery: study protocol for a randomised controlled trial with a non-randomised side-arm	To assess the impact of the anaesthetic technique on the satisfaction of patients undergoing minor VATS.	The PASSAT is the first randomised controlled trial to assess patients' satisfaction depending on LA or GA systematically. The study follows an interdisciplinary approach, and its results may apply to other surgical disciplines. The first cost is based on randomised samples. Comparison of the randomised and the non-randomised groups may contribute to satisfaction research.	
12	Patient satisfaction with peri-operative anaesthesia care and associated factors at two National Referral Hospitals: a cross-sectional study in Eritrea	To assess patient satisfaction with perioperative anaesthesia care and determine the factors that influence satisfaction.	The level of satisfaction among the patients is categorised as moderate. Generally, the study emphasised that the information provision about anaesthesia and surgery was low. Patients described better staff-patient relationship and low fear and concern related to anaesthesia and surgery was observed.	
13	Patient Satisfaction with Oral versus Intravenous Sedation for Cataract Surgery	To determine whether patient satisfaction with oral sedation is non-inferior to intravenous sedation for cataract surgery.	They report the noninferiority of oral compared with intravenous sedation for cataract surgery in a diverse patient population in terms of patient satisfaction.	
14	Factors Affecting Patient Satisfaction with Their Anesthesiologist: An Analysis of 51,676 Surveys From a Large Multihospital Practice	To investigate the factors that predict patient satisfaction with their anaesthesiologist and the anaesthesia experience.	In a large database of patient satisfaction survey data, factors in addition to anaesthesiologist behaviour such as age, outpatient versus inpatient setting, time of surgery, and type of anaesthesia independently affected patient satisfaction with their anaesthesiologist.	

15	Experience of operating an anaesthesia preoperative evaluation clinic in South Korea, An observational study of surgeons' satisfaction	To share their institutional experience of implementing an APEC based on outpatients and report on the medical staff's attitudes and satisfaction (surgeons).	The surgeons' attitude and satisfaction with anaesthetic services, including APEC, are important in achieving quality improvement.	
16	Evaluation of the Determinants of Satisfaction With Postoperative Pain Control After Thoracoscopic Surgery: A Single-Center, Survey-Based Study	To determine patient satisfaction with acute pain management and pain control effectiveness after video-assisted thoracoscopic surgery using a modified version of the Revised American Pain Society Patient Outcome Questionnaire.	The patient satisfaction with postoperative pain treatment was significantly associated with ability to participate in pain management decisions, receiving helpful information about pain treatment options, level of pain intensity at time of survey, lowest pain score in the prior 24 hours, and interference with sleep.	
17	Determinants of women's dissatisfaction with anaesthesia care in labour and delivery	To identify the determinants of women's dissatisfaction with anaesthesia care in labour and delivery	Inadequate or delayed analgesia and treatment-related side-effects are associated with maternal dissatisfaction with obstetric anaesthesia care.	
18	A prospective study on elective surgical on patient satisfaction with perioperative anaesthesia service at Ayder comprehensive specialised hospital, Mekelle, Ethiopia	To assess patient's satisfaction with perioperative anaesthesia service and associated factors.	One hundred twenty consecutive patients were originally enrolled in the study that took over 1 Month. The overall proportion of patients who satisfied with anaesthesia services was 88.33%. Nausea and vomiting, pain, shortness of breath and cold were factors which affected patient satisfaction negatively. Compared with the other studies done at home and abroad, in comprehensive specialised hospital, the overall proportion of patients who responded for satisfaction with perioperative anaesthesia service is low.	

19	A comprehensive analysis of patient satisfaction with anaesthesia	To conduct a comprehensive analysis of patients' satisfaction with anaesthesia.	The most common factors that reduce the assessment of patients' satisfaction with anaesthesia are strong excitement before surgery, no postoperative visit of the anaesthesiologist, no visit of the anaesthesiologist before the operation, not enough attention of anaesthesiologist in the surgery room before anaesthesia, nausea, vomiting, pain, dizziness, general discomfort, and thirst.	
20	Preoperative predictors of patient satisfaction after carpal tunnel release	To investigate preoperative factors among demographic and clinical characteristics, as well as psychological factors that influence postoperative patient satisfaction, to assist preoperative patient consultation for CTR	Univariate analyses demonstrated significant correlations of patient satisfaction with age, preoperative grip power and preoperative. Multivariate analyses showed that age and preoperative CES-D scores were significantly correlated with patient satisfaction.	
21	Patient satisfaction and experience with anaesthesia: A multicenter survey in Saudi population	To evaluate patient satisfaction pre- or post-operative and overall impression using a multicentre prespecified survey tool.	The overall satisfaction level was moderate (56.5%) with nearly half of the patients dissatisfied with their anaesthetic care due to different reasons. Nausea and vomiting control were the most common postoperative reasons for dissatisfaction followed by pain control with 35.6% and 31.7%, respectively	Type of anaesthesia, giving an informative visit to the patient, and controlling postoperative symptoms are the most important predictors of patients' satisfaction.
22	Factors associated with anaesthetic satisfaction after cesarean delivery under neuraxial anaesthesia	To investigate perioperative anaesthetic satisfaction and associated predictive factors in patients receiving cesarean delivery under neuraxial anaesthesia (spinal anaesthesia only or combined spinal-epidural anaesthesia).	The addition of epidural to spinal anaesthesia for cesarean delivery can increase patient satisfaction, whereas paresthesia during needle insertion, lightning pain, failed block, and the use of intraoperative antiemetic were major obstacles to patient satisfaction	Further studies can consider the epidural anaesthesia to spinal anaesthesia by caesarean section can increase patient satisfaction.

23	Effect of video-based education on anxiety and satisfaction of patients undergoing spinal anaesthesia	To investigate the effect of video-based education on anxiety and satisfaction in patients about to undergo spinal anaesthesia.	Providing video-based information during the pre-anaesthetic interview alleviated anxiety and increased satisfaction in patients undergoing spinal anaesthesia	Further studies can consider anxiety-related factors, such as socio-cultural and economic issues, may be warranted to identify subgroups of patients who would benefit from video-based education during the Preanesthetic Interview (PAI)
24	Dataset on customer experience and satisfaction in the healthcare sector of Nigeria	To show a dataset that empirically examines the connection between customer experience (CE) and customer satisfaction (CS)	Using the descriptive and the Categorical Regression CATREG analysis, the data explained how customer experience has a significant relationship with customer satisfaction	
25	Postoperative Visual Analog Pain Scores and Overall Anaesthesia Patient Satisfaction	To assess how postoperative visual analogue scale (VAS) scores for pain compared with anaesthesia patient satisfaction survey scores.	Level of pain is not a sole reliable predictor for overall anaesthesia patient satisfaction, and anaesthesia providers can better understand the multifactorial variables associated with overall anaesthesia satisfaction.	Future studies can use multiple quality indicators that affect overall anaesthesia patient satisfaction.
26	Patient Satisfaction with Anaesthesia Care: What Do We Know?	To conceptualise patient satisfaction with anaesthesia care (PSAC), which has been linked to reimbursement, competency evaluations, and litigation; To describe factors affecting PSAC; To develop provider recommendations to enhance PSAC.	High levels of PSAC are reported using a variety of methods. Modifiable dissatisfiers included anxiety, inadequate explanation of anaesthesia, postoperative pain and nausea or vomiting, long surgeries or wait times, and anaesthesia complications	Future studies can address patient experiences with differing anaesthesia, and methods would help providers try to understand and facilitate patient coping.
27	Postanaesthesia evaluation of emotional and psychological satisfaction in a Hispanic population	To validate a Spanish version of the questionnaire to measure parental and pediatric satisfaction after anaesthesia and facilitate the provision and quality management of anaesthesia care in Hispanic populations.	This questionnaire proved to be simple and easy to understand within the literate Spanish-speaking population. It had adequate content validity and high reliability, acceptability, reproducibility, and construct validity.	this Spanish questionnaire can be used with success among Hispanic populations resulting in improved care for that undergoing anaesthesia, and therefore, patient satisfaction

28	The patient-reported outcome of adult perioperative anaesthesia in the United Kingdom: a cross-sectional observational study	To understand the patient perspective on healthcare is central to the evaluation of quality.	There are 35% of patients reported severe discomfort (Anxiety and discomfort after surgery are common), and only 5% reported dissatisfaction (satisfaction with anaesthesia care in the UK is high).	
29	Patient preference for the pre-anaesthesia evaluation: Telephone versus in-office assessment	To assess patient satisfaction with a telephone PAE and determined whether patients preferred a telephone PAE or a conventional clinic visit	A telephone based PAE provides high patient satisfaction over a traditional office visit while increasing patient convenience. Most patients in this survey preferred a telephone PAE.	Future studies can consider using the telephone PAEs compare well with in-person examinations.
30	First steps in validating the Pediatric Anaesthesia Parent satisfaction (PAPS) survey	To develop and validate a set of survey questions that evaluate parental satisfaction with the pediatric anaesthesia services to identify strengths and potential areas for improvement.	The PAPS survey is a short and simple tool for evaluating parent satisfaction with pediatric anaesthesia services and provides some evidence for validity and reliability. The majority (greater than 95%) of parents reported were satisfied or very satisfied with the care provided by the pediatric anaesthesia department	Future studies can compare different surgical programs.

3. Results and Discussion

Using the mini review approach, this study found that patient satisfaction with health services is subjective and complex. Patient satisfaction defined as the gap between patient expectations and patient perceptions of events that have happened to the patient (Andemeskel et al., 2019). Patient satisfaction can assess the quality of health services, performance, work plans, institutional policies, training, document monitoring activities, and a key determinant of patient loyalty (Siraneh et al., 2020). Siraneh et al. (2020), Suhail and Srinivasulu (2020), Mathew et al. (2020), Anaba et al. (2020), Lucadamo and Camminatiello (2020), they assess the patient satisfaction using several elements, including tangibility, reliability, responsiveness, assurance, empathy. Patient satisfaction depends on the patient's physical, emotional, mental, socioeconomic, and cultural factors (Zauner et al., 2016). Sinbukhova and Lubnin (2019) stated that patient's satisfaction is very important to anaesthesia service. Patient satisfaction in anaesthesia services is carried out perioperatively (Falco et al., 2017). Anaesthesia services are not only applicable to adult patients but also children. The measurement of patient satisfaction is also carried out directly on the patient's and their parents, using certain methods (Galetin et al., 2018; Bae et al., 2018; Borishade et al., 2018). In pre-anaesthesia, we need to identify how the attitude of the anaesthetist and risk. The anaesthesia team's attitude in the operating room, environment, and others for post-aesthesia visits PONV (Post-Surgery Nausea Vomiting), postoperative pain. Various methods can do this satisfaction research. This study's findings are that patient satisfaction is a complex and multi-dimensional concept influenced by several variables such as previous anaesthesia experience, techniques used, duration of procedures, respect for privacy, and communication.

4. Conclusion

Assessment of patient satisfaction is one part of assessing the quality of service, especially anaesthesia services. Patient satisfaction is a complex and multi-dimensional concept influenced by several variables such as previous anaesthesia experience, techniques used, duration of procedures, respect for privacy, and communication. In conclusion, patient satisfaction with anaesthesia services can increase or decrease. Several factors can influence this, and these factors can be properly handled by creating awareness about the importance of customer satisfaction in service and conducting training to improve it in people who work in an anaesthetic environment, including for anaesthetists.

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