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Original Article

Patient Satisfaction and Knowledge of Informed Consent Among Patients Undergoing Elective Surgery: A Cross-Sectional Questionnaire Study

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ABSTRACT

Background: Patient satisfaction and understanding of informed consent are important indicators of quality surgical care and patient autonomy.

Methods: A cross-sectional questionnaire study was conducted among 150 adults undergoing elective surgery at two hospitals in Chennai. Participants were interviewed postoperatively using a structured questionnaire covering demographic characteristics, perioperative satisfaction, and informed-consent experiences. Data were summarized using frequencies and percentages, with chi-square goodness-of-fit analysis used to assess response distributions.

Results: Satisfaction was high for staff friendliness (88.7%), operating-room comfort (88.0%), and overall surgical experience (76.0%). However, only 21.3% recalled being informed about alternatives, 26.0% knew they could refuse treatment, and 12.7% knew consent could be withdrawn. Overall satisfaction with the consent process was 87.3%.

Conclusion: Despite high satisfaction, important gaps existed in informed-consent understanding. Clear, patient-centred communication and adequate counselling are needed to support informed and autonomous decision-making.

Keywords: patient satisfaction; informed consent; elective surgery; perioperative care; patient education; questionnaire study

INTRODUCTION

Patient satisfaction is an important patient-reported indicator of healthcare quality. It reflects patients' perceptions of communication, interpersonal interaction, dignity, comfort, information provision, and the quality of care received [1]. Patient satisfaction complements conventional clinical outcomes by capturing aspects of healthcare that may not be reflected by morbidity, mortality, or other clinical indicators. Informed consent is an essential component of ethical and patient-centred healthcare. It involves providing patients with understandable information regarding a proposed intervention, including its purpose, potential benefits, relevant risks, and available alternatives, thereby enabling voluntary decision-making [2]. In surgical practice, informed consent also provides an opportunity for patients to clarify doubts and develop realistic expectations regarding treatment.

The quality of informed consent depends not only on the presence of a signed document but also on the communication process preceding the signature. Previous studies have demonstrated that patients may express satisfaction with the consent process while having limited recall or understanding of specific information provided during consent [3–5]. Factors such as health literacy, complexity of medical information, communication quality, and timing of consent may influence patient understanding.

Elective surgery provides an appropriate setting for assessing these issues because, unlike emergency surgery, there is generally an opportunity for discussion and deliberation before the procedure. Nevertheless, previous studies have identified gaps in patients' recall of risks, benefits, alternatives, and other components of informed consent [3,7,19]. Patient satisfaction after surgery is generally influenced by multiple aspects of care, including interpersonal communication, comfort, information provision, anaesthetic care, postoperative pain management, and expectations regarding treatment [6,8]. Therefore, assessment of satisfaction together with patients' experiences and understanding of informed consent may provide a broader picture of patient-centred surgical care. The present study was undertaken to assess patient satisfaction with the perioperative experience and to describe patients' knowledge, recall, and experience of informed consent among adults undergoing elective surgery.

METHODS

Study design and setting: This cross-sectional questionnaire-based study was conducted among adult patients undergoing elective surgery at ACS Medical College and Hospital and Sri Lalithambigai Medical College and Hospital, Chennai. The study was initiated after obtaining approval from the Institutional Ethics Committee. Written informed consent was obtained from all participants before participation.

Study participants and sample size: A total of 150 adult patients scheduled for elective surgery were included in the study. The sample size was 150, based on the planned study population and the number of participants recruited during the study period. Patients aged >18 years who were scheduled for elective surgical procedures were eligible for inclusion. Patients undergoing emergency surgery, those who declined participation, and patients requiring ventilatory support were excluded.

Data collection procedure: Data were collected using a structured interviewer-administered questionnaire. Participants were interviewed during the postoperative period following their surgical procedure. The questionnaire consisted of three sections. The first section collected demographic and clinical information, including age, gender, educational status, and type of surgery. The second section assessed satisfaction with perioperative care using six items covering comfort in the operating room, information provided about the operation, postoperative pain control, friendliness of doctors and staff, quality of medical care, and overall satisfaction. Each item was recorded as satisfied, neutral, or unsatisfied. The third section assessed patients' knowledge, recall, and experience of the informed-consent process. Items addressed the legal nature of the consent form, disclosure of risks and benefits, explanation of alternatives, opportunity to ask questions, adequacy and timing of consent, awareness of the right to refuse or withdraw consent, and overall experience of the consent process. Responses were recorded using yes, no, or don't know, where applicable. The questionnaire was developed for the present study based on relevant literature on informed consent and patient satisfaction. It was not a previously validated psychometric instrument. Therefore, formal reliability and validity testing and a composite scoring system were not undertaken.

Knowledge, recall, experience, and satisfaction items were analysed individually rather than combined into an overall score.

Ethical considerations

Participation was voluntary, and participants were informed about the purpose of the study before enrolment. Written informed consent was obtained from each participant. Confidentiality of the collected information was maintained, and the data were used only for research purposes.

Statistical analysis

Data were entered into a computerized database and analysed using descriptive statistics. Categorical variables were expressed as frequency and percentage. For the six satisfaction items, responses were categorized as satisfied, neutral, or unsatisfied. For the informed-consent items, responses were categorized as yes, no, or don't know, except for items that were originally recorded using specific response categories such as timing of consent. A chi-square goodness-of-fit test was used for individual three-category questionnaire items to determine whether the observed distribution of responses differed significantly from an equal distribution across the response categories. The null hypothesis assumed an equal distribution of responses among the three categories. A two-sided p-value <0.05 was considered statistically significant. The chi-square tests were used to assess the distribution of responses and were not interpreted as evidence of clinical importance or as comparisons between independent patient groups. No composite satisfaction or knowledge score was calculated because the questionnaire had not undergone formal psychometric validation and no scoring algorithm had been prespecified.

RESULTS

Demographic and clinical characteristics: A total of 150 patients undergoing elective surgery were included. The largest age groups were 41–60 years (38.7%) and 21–40 years (38.0%). Females constituted 54.0% of the study population, while males accounted for 44.7% and transgender participants for 1.3%. Regarding educational status, 44.7% were undergraduates, while 18.0% had no formal education. Minor elective procedures were performed in 53.3% of participants and major procedures in 46.7% (Table 1).

Variable	Category	n	%
Age group (years)	≤20	5	3.3
	21–40	57	38.0
	41–60	58	38.7
	>60	30	20.0
Gender	Male	67	44.7
	Female	81	54.0
	Transgender	2	1.3
Educational level	No formal education	27	18.0
	Primary school	11	7.3
	High school	16	10.7
	Higher secondary	21	14.0
	Undergraduate	67	44.7
	Postgraduate	8	5.3
Type of surgery	Minor	80	53.3
	Major	70	46.7

Table 1. Demographic and clinical characteristics of study participants (N = 150)

Patient satisfaction with perioperative care: Patient satisfaction with perioperative care was generally high. Satisfaction with operating-room comfort was reported by 132 (88.0%) participants, while 17 (11.3%) were neutral and 1 (0.7%) was unsatisfied. Similarly, 133 (88.7%) participants reported satisfaction with the friendliness of doctors and staff. Satisfaction with information provided about the operation was reported by 123 (82.0%) participants. Satisfaction with the quality of medical care was reported by 110 (73.3%), while 114 (76.0%) reported overall satisfaction with the surgical experience. Postoperative pain control had the lowest proportion of satisfied responses, with 84 (56.0%) participants reporting satisfaction and 65 (43.3%) giving a neutral response. Only one participant (0.7%) reported dissatisfaction with pain control. The observed distributions across response categories were statistically significant for all six satisfaction items ($p < 0.001$) (Table 2).

Knowledge and experience of informed consent: Responses concerning informed consent were more variable than those concerning perioperative satisfaction. A total of 104 (69.3%) participants recognized the consent form as a legal document. However, only 39 (26.0%) were aware that they could refuse the proposed procedure, and only 19 (12.7%) knew that consent could be withdrawn after signing. Only 32 (21.3%) participants recalled being informed about alternatives to the planned procedure, while 81 (54.0%) reported that the risks of surgery had

been explained and 111 (74.0%) reported receiving information about the benefits. An opportunity to ask questions was reported by 66 (44.0%) participants. Regarding the timing of consent, 70 (46.7%) participants reported signing the consent form more than 24 hours before surgery, whereas 66 (44.0%) reported signing it less than 4 hours before surgery. Overall satisfaction with the consent process was nevertheless high, with 131 (87.3%) participants reporting satisfaction (Table 3).

Item	Satisfied n (%)	Neutral n (%)	Unsatisfied n (%)	p-value
Comfort in operating room	132 (88.0)	17 (11.3)	1 (0.7)	<0.001
Information given about operation	123 (82.0)	25 (16.7)	2 (1.3)	<0.001
Postoperative pain control	84 (56.0)	65 (43.3)	1 (0.7)	<0.001
Friendliness of doctors/staff	133 (88.7)	16 (10.7)	1 (0.7)	<0.001
Quality of medical care	110 (73.3)	38 (25.3)	2 (1.3)	<0.001
Overall surgical satisfaction	114 (76.0)	32 (21.3)	4 (2.7)	<0.001

Table 2. Patient satisfaction with perioperative care (N = 150)

Timing of consent

Among the participants, 70 (46.7%) reported signing the consent form more than 24 hours before surgery, while 66 (44.0%) reported signing it less than 4 hours before surgery. Fourteen (9.3%) were unsure of the timing. This indicates considerable variation in the interval between consent signing and the surgical procedure. Overall, satisfaction with perioperative care was high, with satisfaction rates ranging from 56.0% for postoperative pain control to 88.7% for staff friendliness. In contrast, several specific elements of informed-consent knowledge and recall were less frequently reported. Awareness of the right to refuse surgery was 26.0%, and awareness of the right to withdraw consent after signing was 12.7%. Only 21.3% recalled being informed about procedural alternatives. Despite these gaps in specific knowledge and recall, 87.3% of participants reported overall satisfaction with the consent process.

Informed-consent item	Yes n (%)	No n (%)	Don't know n (%)	p-value
Consent form is a legal document	104 (69.3)	11 (7.3)	35 (23.3)	<0.001
Informed of alternatives to procedure	32 (21.3)	101 (67.3)	17 (11.3)	<0.001
Time given to sign was sufficient	63 (42.0)	68 (45.3)	17 (11.3)	<0.001
Knew they could refuse the procedure	39 (26.0)	82 (54.7)	29 (19.3)	<0.001
Knew consent could be withdrawn later	19 (12.7)	100 (66.7)	31 (20.7)	<0.001
Benefits of surgery were explained	111 (74.0)	25 (16.7)	14 (9.3)	<0.001
Risks of surgery were explained	81 (54.0)	56 (37.3)	13 (8.7)	<0.001
Had an opportunity to ask questions	66 (44.0)	28 (18.7)	56 (37.3)	<0.001
Overall satisfaction with consent process	131 (87.3)	3 (2.0)	16 (10.7)	<0.001

Table 3. Selected patient knowledge and experience of informed consent (N = 150)

DISCUSSION

The present study assessed patient satisfaction with perioperative care and patients' knowledge, recall, and experience of the informed-consent process among adults undergoing elective surgery. Overall, patients reported a high level of satisfaction with several aspects of perioperative care, whereas important gaps were observed in their understanding of key elements of informed consent. This contrast suggests that a positive experience of surgical care does not necessarily indicate adequate understanding of the information required for autonomous decision-making. In the present study, 88.0% of patients were satisfied with their comfort in the operating room and 88.7% reported that doctors and staff were friendly.

Similarly, 73.3% were satisfied with the quality of medical care and 76.0% reported overall satisfaction with their surgical experience. These findings indicate generally favourable perceptions of the interpersonal and clinical aspects of perioperative care. Patient satisfaction is influenced by multiple factors, including communication, interpersonal behaviour, respect, responsiveness, the physical environment, and whether patients' expectations are met [1–3]. Good communication and respectful interactions may therefore contribute substantially to patients' positive perceptions of healthcare services.

However, satisfaction with pain management was comparatively lower. Only 56.0% of patients reported being satisfied with postoperative pain control, while 43.3% were neutral. Postoperative pain is an important determinant of patient experience and may influence overall satisfaction even when other aspects of care are perceived positively [4,5]. Adequate assessment of pain, timely analgesic intervention, and communication regarding expected postoperative pain may help improve patients' experiences following surgery.

The findings related to informed consent were less favourable. Although 69.3% of participants recognised that the consent form was a legal document, only 21.3% reported being informed about available alternatives. Similarly, only 26.0% knew that they could refuse a proposed procedure and 12.7% knew that consent could subsequently be withdrawn. These findings demonstrate that recognition of the formal nature of consent does not necessarily correspond to understanding of the broader principles of informed consent. Informed consent is not simply the signing of a document; it involves communication of relevant information, understanding, voluntariness, and the opportunity to make an autonomous decision [6–8].

The relatively low recall of alternatives is particularly important. Informed decision-making requires patients to be aware not only of the proposed intervention but also of reasonable alternatives, including the option of declining treatment when appropriate [6,7]. In the present study, 67.3% of patients reported that they had not been informed about alternatives, while a further 11.3% were unsure. This finding may reflect limitations in the timing, content, or communication of the consent discussion.

Previous research has similarly demonstrated that patients may remember the decision to undergo treatment but have limited recall of specific information regarding risks, benefits, and alternatives [9,10]. Knowledge regarding the right to refuse or withdraw consent was also limited. More than half of the participants did not know that they could refuse the proposed intervention, and two-thirds did not know that consent could be withdrawn later. Respect for patient autonomy requires that consent remain voluntary and that patients understand that they retain the right to reconsider their decision, subject to the clinical circumstances and applicable legal framework [6,8]. These findings therefore indicate an area where routine consent discussions could be strengthened.

Regarding the information actually communicated, 74.0% of participants reported that the benefits of the procedure had been explained, whereas only 54.0% reported that risks had been explained. In addition, only 44.0% reported having an opportunity to ask questions, while 37.3% were unsure whether they had such an opportunity. This difference between explanation of benefits and risks may be relevant because balanced consent requires discussion of material risks as well as expected benefits and reasonable alternatives [6,7]. Providing a specific opportunity for questions and encouraging patients to express their concerns may improve understanding and allow clinicians to identify misconceptions. The timing of consent also warrants attention. In the present study, 46.7% of patients reported that consent was obtained more than 24 hours before surgery, whereas 44.0% reported that it occurred less than four hours before surgery. Although the appropriate timing of consent depends on the procedure and clinical circumstances, consent should ideally be obtained sufficiently early to allow meaningful discussion and consideration rather than functioning primarily as an administrative step immediately before surgery [6-10]. Earlier counselling may provide patients with an opportunity to discuss uncertainties with healthcare professionals and family members before making their decision. Interestingly, 87.3% of participants were satisfied overall with the consent process, despite the relatively low recall of alternatives and patient rights. This finding highlights an important distinction between satisfaction and informed understanding. Patients may feel satisfied with the manner in which healthcare professionals communicate with them while still having limited knowledge of specific elements of informed consent.

Consequently, satisfaction alone should not be used as a surrogate measure of the adequacy of informed consent. The findings should also be interpreted in light of the study design. This was a cross-sectional questionnaire-based study involving 150 elective surgical patients from two institutions. The questionnaire was developed for the present study and was not a previously validated instrument; therefore, the individual responses should be interpreted as descriptive measures of patients' reported knowledge, recall, and experience rather than as a validated overall knowledge score. In addition, the postoperative timing of the interview may have influenced participants' recall of the consent discussion. The study also did not examine associations between demographic characteristics and individual consent responses. Therefore, the findings describe the observed response distribution rather than establishing causal relationships. Overall, the study demonstrates that high patient satisfaction with perioperative care can coexist with inadequate understanding of important informed-consent principles. Improving consent practice should therefore focus not only on obtaining a signature but also on ensuring meaningful communication about risks, benefits, alternatives, the voluntary nature of the decision, and patients' rights to ask questions and reconsider their decisions. Use of plain language, adequate time for discussion, patient-specific counselling, and simple methods such as asking patients to explain their understanding in their own words may strengthen the informed-consent process and support patient autonomy.

CONCLUSION

Patients undergoing elective surgery reported generally high satisfaction with perioperative care, particularly regarding staff friendliness, operating-room comfort, and overall surgical experience. However, important gaps were identified in patients' understanding and recall of informed consent, especially regarding available alternatives, the right to refuse or withdraw consent, and opportunities to ask questions. These findings highlight the need for clear, patient-centred counselling using simple language, adequate time for discussion, and confirmation of patient understanding before elective surgery. Strengthening the informed-consent process may improve patient participation, autonomy, and satisfaction with surgical care.

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REFERENCES

1. Leclercq WK, Keulers BJ, Scheltinga MR, Spauwen PH, van der Wilt GJ. *A review of surgical informed consent: past, present, and future. A quest to help patients make better decisions. World J Surg.* 2010 Jul;34(7):1406-15. doi: 10.1007/s00268-010-0542-0.
2. World Health Organization. *A Declaration on the Promotion of Patients' Rights in Europe. European Consultation on the Rights of Patients. WHO Regional Office for Europe;* 1994.
3. Akkad A, Jackson C, Kenyon S, Dixon-Woods M, Taub N, Habiba M. *Informed consent for elective and emergency surgery: questionnaire study. BJOG.* 2004;111(10):1133-8.
4. de Guzman GS, Amosco MD. *Patient experience and decisional satisfaction with the informed consent process for elective gynecologic surgeries: a cross-sectional study. Ann Med Surg.* 2022;81:104551.
5. Levy KS, Smith MK, Lacroix M, Yudin MH. *Patient satisfaction with informed consent for cesarean and operative vaginal delivery. J Obstet Gynaecol Can.* 2022.
6. Myles PS, Williams DL, Hendrata M, Anderson H, Weeks AM. *Patient satisfaction after anaesthesia and surgery: results of a prospective survey of 10,811 patients. Br J Anaesth.* 2000;84(1):6-10.
7. Biyazin T, Taye A, Belay Y, et al. *Patient satisfaction with surgical informed consent at Jimma Medical Center, Ethiopia. BMC Med Ethics.* 2022;23:57.
8. Ross CK, Steward CA, Sinacore JM. *A comparative study of seven measures of patient satisfaction. Med Care.* 1995;33(4):392-406.
9. Jefford M, Moore R. *Improvement of informed consent and the quality of consent documents. Lancet Oncol.* 2008;9(5):485-93.
10. Meisel A, Roth LH. *Toward an informed discussion of informed consent: a review and critique of the empirical studies. Ariz L Rev.* 1983;25:265.

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