ASSESSMENT OF PATIENT SATISFACTION WITH THE PRE-OPERATIVE ANESTHETIC EVALUATION; AN OBSERVATIONAL STUDY

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ABSTRACT

OBJECTIVES

This study aimed to determine patient satisfaction with the pre-operative anaesthetist visit.

METHODOLOGY

A cross-sectional study was conducted from March to September 2023. All consecutive elective patients operated under anaesthesia during the study period were interviewed 24 hours after the operation. Data were collected by the Leiden peri-operative patient satisfaction questionnaire (LPPSq) within 24 hours postoperatively. SPSS 26 version was used for data analysis. The chi-square test was used to compare pre-operative visits and patient satisfaction.

RESULTS

230 elective patients were operated upon under anaesthesia during the study period. Among all sections, the Fear and concern factor has the highest Cronbach alpha, 0.942. almost half of the patients aged 26-35 (42.2%) were female (56.3%), Class I in ASA physical status (50.2%), and living in a rural area (64.9%). For occupation, the majority of respondents were unemployed (89.2%). In addition, more than half of the respondents received general anaesthesia (60.6%). The most frequent procedure type was the gynaecology procedure (38%). Regarding an anaesthetist's visit, most respondents received a pre-operative anaesthetist visit (89.6%) and an anaesthetist approach (73.6%). However, the majority didn't receive adequate information, didn't have a chance to choose the type of anaesthesia, and didn't have an opportunity to ask a question, with percentages of 68%, 90%, and 95.2%, respectively. A significant and strong association existed between patient satisfaction and pre-operative anaesthetist visits (P<0.000).

CONCLUSION

Patient satisfaction with the pre-operative anaesthetic evaluation was the same compared with the Royal College of Anaesthetists standards. There is an association between pre-operative anaesthetist visits and patient satisfaction. Pre-operative anaesthetic evaluation should be emphasized.

KEYWORDS: *Anesthetist Visit, Patient Satisfaction, Pre-Operative Anaesthetist Visit, Anaesthesia Services*

INTRODUCTION

Patient satisfaction is a complex concept that highly depends on the subjective judgment of a patient. It is related to several factors, including the patient's emotional, social, and cultural factors and values, past experiences, and future expectations. It refers to the degree of fulfilment of patients' expectations by the care provided.[1] Patients tend to compare their expectations with the experiences they had as well as with the actual outcomes. The patient may become dissatisfied when the situation does not meet those expectations. Hence, patient satisfaction depends on the consistency between what the patient expects and what is perceived or experienced.[2] Evaluating patient satisfaction is a core aspect of continuous quality improvement in anaesthesia services. This can be significantly affected by the pre-operative anaesthetist visit.[3] Pre-operative anaesthetist visits and preparation are essential parts of anaesthetic provision. It is helpful to know about the patient's general status and the nature of the surgery and to choose the type of anaesthesia.[4,5] This allows the patients to get to know the anaesthetist, learn about anesthesia options, and discuss post-operative pain, nausea, vomiting management options, and other possible complications. In addition, pre-operative assessment decreases patient anxiety, minimizes the cancellation of surgery by surgeons and anaesthetists, improves the patient's hospital stay experience, and may reduce complication rates and

mortality.[6,7] Pre-operative assessment is also crucial in terms of obtaining consent. Although anaesthesia services differ from country to country worldwide, they should be as comprehensive as possible. The anaesthesia service in the University of Gondar, a teaching and referral hospital, starts with the pre-operative evaluation of patients during the night before the day of surgery in the respective wards, intending to assess the patient's medical condition, evaluating the patient's overall health status; determining risk factors related to anaesthesia; educating the patient; discussing the techniques of anaesthesia and available options for post-operative management; and obtaining consent. Patients scheduled for day-case surgery are evaluated a few days before the day of surgery and are briefly reevaluated on the day of surgery.[1,5,6] However, no study has been conducted in our hospital that could show patient satisfaction with the pre-operative anaesthetic evaluation. The present study aimed to determine patient satisfaction with the pre-operative anaesthetic evaluation over a wide range of surgical specialties and among patients operated upon under general and regional anaesthesia during the study period.

METHODOLOGY

This study was designed as a cross-sectional study to determine patient satisfaction with the pre-operative anaesthetic evaluation. The sample size for this study was 230; 90.4[4] by taking a 99% confidence interval. Following ethical approval (NO. 247/BKMC) by the institutional ethical approval committee, the study was conducted at the Mardan Medical Complex MMC Mardan. All consecutive admitted elective patients undergoing minor and major surgery under spinal and general anaesthesia during the data collection period were included. There were no day-case surgeries during the study period. Those patients who were discharged earlier than 24 hours after the operation, patients with psychiatric problems or going through unconsciousness for 24 hours after surgery, and patients who have already done procedures in MMC Mardan and Post-operative ICU/HDU admission were excluded. Any surgical procedure in which a mesenchymal barrier is opened, including those in which a bodily cavity is invaded, organs are removed, or normal anatomy is altered, was considered a big operation (pleural cavity, peritoneum, meninges). Minor operations include vascular cutdown for catheter implantation or implanting pumps in subcutaneous tissue, requiring skin, mucous membranes, and connective tissue resection. A questionnaire will be used to assess patient satisfaction with anaesthesia care using the Leiden peri-operative Care Patient Satisfaction Questionnaire (LPPSq). Informed consent will be obtained from patients, and the purpose of the research will be thoroughly explained. We did not employ a specialized instrument to assess the level of comprehension experienced by each patient quantitatively. The outcomes were evaluated in light of the pre-operative anaesthetic evaluation criteria established by the Royal College of Anaesthetists. The initial segment of the questionnaire relates to the demographic data (age, gender, marital status, professional status, and type of surgery). The questionnaire contains three aspects of the peri-operative evaluation. The first aspect is patient satisfaction, which includes three dimensions (information, fear and concern, and staff-patient relationship). The second aspect of the questionnaire assesses professional competence and service. The third one assesses the prevalence of undesirable anaesthesia outcomes (discomfort and needs).

RESULTS

Table 1: Baseline Characters of the Population (N= 230)

		Frequency (n)	%age
Age	18-25	61	26.5
	26-35	97	42.2
	36-45	34	14.8
	45<	38	16.5
Gender	Male	101	43.7
	Female	130	56.3
ASA physical status:	Class I	116	50.2
	Class II	109	47.2
	Class III	06	2.6
Residence	Rural	150	64.9
	Urban	81	35.1
Occupation	Unemployment	206	89.2
	Employment	25	10.8
Anesthesia type	General	140	60.6
	Regional	88	38.1
	Sedation	03	1.3
Procedure type:	Gynaecology	88	38.1
	General	56	24.2
	Ear Nose Throat	28	12.1
	Orthopedic	42	18.2
	Neuro	13	5.6
	Renal	04	1.7
Surgery duration (hours)	One hour	119	51.5
	Two hours	59	25.5
	Three hours	34	14.7
	Four hours	15	6.5
	Five hours	04	1.7
Pre-Operative Anesthetist Visit	No	24	10.4
	Yes	207	89.6
Anesthetist Approach	No	61	26.4
	Yes	170	73.6
Adequate Anesthesia Information	No	157	68.0
	Yes	74	32.0
Chance to choose the type of anaesthesia	No	208	90.0
	Yes	23	10.0
Chance to ask questions	No	220	95.2
	Yes	11	4.8

Table 2: Cronbach's Alpha

Variable	N	Cronbach Alpha
Information factor	04	0.91
Discomfort and Needs Factor	07	0.75
Fear and concern factor	07	0.942
Staff–patient relationship factor	13	0.971
Service factor	03	0.745

All factors were reliable based on the reliability test using Cronbach alpha, with Cronbach alpha values exceeding 0.60**.**

Table 3: Patient Satisfaction Status

		Frequency	%age
Valid	Yes	181	78.7
	No	49	21.3
	Total	230	100.0

Table 4: Pre-operative Anesthetist Visit with Patient Satisfaction

Count						
		Patient satisfied		Total	P Value	Cramer's V
		Yes	No			
Pre-operative Anesthetist Visit	Yes	175	32	207	0.000	0.428
	No	06	17	23		
Total		181	49	230		

*The p-values reported < 0.001, indicating a statistically significant association between Pre-operative Anesthetist Visit" and "Patient Satisfaction. A value of Cramer's V .428 suggests a strong association.

DISCUSSION

An anaesthetist's pre-operative evaluation of a surgical patient is an essential interaction between the patient and the anaesthetist. Anesthesiologists play a crucial role in the surgical process by evaluating patients before surgery.[8] The anaesthetist can learn more about the patient's health, identify any potential risks associated with anaesthesia, inform the patient of their rights, review the various anaesthetic methods and post-operative care plans, and ultimately acquire the patient's informed permission.[9] The pre-operative evaluation informs the patient about the anaesthetic and any potential issues that may emerge during the peri-operative phase. As a result of the findings of this evaluation, surgical intervention may be avoided or postponed. All these steps can increase anaesthesia's security, ultimately benefiting surgical patients. The degree to which patients are happy with their care is also considered significant.[10] Patient satisfaction with the pre-operative anesthesiologist visit was low in this clinical audit. This could be due to a lack of knowledge about the many types of anaesthesia, their potential side effects and difficulties, and how to handle them throughout the peri-operative period. Another possible contributor is a lack of pre-operative education about the anaesthetist's role in post-operative care. Information provided in the areas of anaesthetists' self-introductions, the adequacy of time spent by the anaesthetists with the patients, the adequacy of the anaesthetists' responses to the patient's questions, and the reduction of anxiety felt by the patients after the anaesthetist visit suggests that few anxiety reduction techniques were used during the pre-operative evaluation of the patients.[11] Pre-operative anxiety that might be caused by a lack of adequate information about anaesthesia and surgery is one of the most common causes of patient dissatisfaction in patients undergoing operation, which is reflected in this study. However, This finding did not agree with a study conducted in Greece.[12,13] This gap can be attributable to a well-organized pre-operative patient evaluation and post-operative patient management approach in Greece, which did not exist in our instance. On the other hand, our finding was based on a study conducted in Sri Lanka.[14] High levels of worry, which can lead to dissatisfaction, may have resulted in this study since only a minority of patients, 33 (32.4%), were given information on the type of anaesthetic.[15,16,17] Research done in Ethiopia found similar results.[18] The amount of information given about the possible post-operative complications and their management options, post-operative analgesia, and PONV was low. Fear of anaesthesia, surgery, post-operative pain, post-operative nausea and vomiting are some of the most common factors causing significant patient dissatisfaction in patients undergoing elective operation. The information given to the patients was inadequate compared with the Royal College of Anaesthetists' pre-operative anaesthetic evaluation standards.

LIMITATIONS

The fact that this is a single-center study may be the study's primary weakness. Participants were required to complete a questionnaire before being discharged, which may have limited patients' ability to express themselves due to their need on care. The use of a quantitative approach to measure patient happiness may not fully capture the patients' ideas, which might be supplemented with a qualitative approach.

CONCLUSIONS

Patient satisfaction with hospital's pre-operative anesthetist visit was high. However, there were some issues with anaesthetists' self-introductions, information provision, and reassuring patients. Pre-operative fasting instructions and time spent with

patients were good.

CONFLICT OF INTEREST: None

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