

RESEARCH ARTICLE

PERCEPTION OF PATIENTS ABOUT THE INFORMATION GIVEN IN PRE-OPERATIVE ANESTHESIA EVALUATION'S PERIOD

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Manuscript Info

Abstract

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Keywords:-

Perception, Patient, Preoperative Anesthesia, Evaluation Information Satisfaction **Introduction:** A study to analyze the perception of patients regarding the information provided in the pre-operative anesthesia evaluation period. The purpose of this study was to determine the level of patient perception regarding the information contained in the pre-anesthetics clinics. The anesthesiologist evaluates all patients to assess the medical condition and prepare for the planned procedure. The American Society of Anesthesiologists has brought out essential calibers for pre-operative anesthetic evaluation that suit all patients who come in for all methods of anesthesia.

Objective: The objective of this study was to identify the perception of patients regarding the information they received in the pre-operative anesthesia evaluation clinics

Methods: A study dealt with descriptive-analytical research of patients' perceptions regarding the information during pre-operative anesthesia evaluation. It was done using a structured questionnaire to measure overall patient perception using Likert's scores; Three hundred samples were selected by using organized random sampling. The duration of the study was from 2016- 2019

Result: In this study, a survey includes specific questions about patient perception regarding the information given for them when coming in for pre-operative anesthesia evaluation. Investigation shows a low level of comprehension and found an average of only 48.3% of perception for the given information.

Conclusion: This study shows that patients lack the optimum level regarding the perception of the information provided in pre-operative anesthesia evaluation. The study is recommending further studies to investigate the causes of low perception of pre-operative anesthesia evaluation among the concerned patients.

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Introduction:-

The plan of an anesthesia clinic for evaluation of patients before surgery, which provides them with the strength and health benefits as possible, as mentioned in the literature for >70 years.(Douglas Stoddard *et al.*, 2016), in which theanesthesiologist evaluates all patients to assess the medical condition and prepare for the planned procedure,

Corresponding Author:- Hassan Shuaaieb Mohamed Shaaib / Anesthesia Technology Specialist Address:- Dept. of Anesthesia Technology, PSMCHS- Dhahran KSA. implement strategies to reduce risk, and develop a plan for anesthesia. ('Practice advisory for preanesthesia evaluation: An updated report by the American Society of Anesthesiologists Task Force on Preanesthesia Evaluation,' 2012)

One of the biggest challenges in Sudan was patient understanding in the field of anesthesia evaluation before surgery, and most patients suffer from finding enough about the clinic. Recent studies in Sudan have shown some apparent obstacles that anesthesiologists may face when dealing with this field, for example, an inappropriate declaration of guidelines Also, a lack of awareness of the advantages of pre-anesthesia evaluation. (Elnoor Tasneem and Khalid Elham, 2015)

This study is investigating the association between patient perception and the information provided in the assessment of pre-operative anesthesia. The study hypothesized that the perception is low; many developing countries, such as Sudan, have difficulties in distributing adequate budgets, and health spending are deficient. As well as the inefficient use of available resources, mainly for administrative reasons, low economic performance, and population growth, leading to weak growth in health as well as the poor budget allocation and limited opportunities for excellent social services, including healthcare. (*WHO | Regional Office for the Eastern Mediterranean*, 2018)

Sharing information and communication between patients and anesthesiologists is seen as an essential clinical function in the construction of a good doctor-patient relationship, which is the core and skill of the anesthesia. Patient satisfaction determined by the form of communication that happens. Reliable information is the starting point of shared understanding and confidence. (Begum, 2015).

Several other studies have described patient satisfaction and acceptance to participate in the choice of surgical anesthesia care. Almost all patients who are aware of anesthesia options and who participate in the decision-making process are satisfied and feel the best respect, and most patients want asupportive role.(Hwang *et al.*, 2014)

The relationship between the doctor and the patient is significant for the anesthesiologist, who usually finds the patient just directly before the operation. Another problem is that the patient is unconscious while he/she under the care of an anesthesiologist.

The American Society of Anesthesiologists has brought out essential calibers for pre-anesthetic evaluation that suit patients come in for all methods of anesthesia. For many years, pre-operative assessment comprised of a group of "ordinary screening." many native and worldwide studies have examined the utility and the necessity for this information. (Baghaei Tehrani, 2017). Thus, pre-operative and anesthesia evaluation is critical to establish a good relationship with the patient. Family members should also be included during these patient meetings (as long as the patient does not object), (John F. Butterworth IV, David C. Mackey, 2013)

In recentstudies, researchers found potential associations between many factors and measures of satisfaction. Research had seen in a standardized patient satisfaction using a phone survey consisting of 25 questions (1-10 rating scale) inquired about scheduling, parking, office staff, teamwork, wait-time, radiology, provider interactions/behavior, treatment, and follow-up communication. They found Potential associations between these factors' and primary outcome measures of satisfaction. However, many of the sources collect reluctant data on satisfaction in disclosing detailed information, which means there is still little information on the determinants of patient satisfaction. (Bible *et al.*, 2018)

All patients coming for anesthesia should have adequate perception regarding the care of patients in pre-operative anesthesia evaluation to improve standards of anesthesia care as well as to maximize satisfaction and benefits.

Statement of the Problem:-

A study to assess the perception of patients regarding information given in pre-operative anesthesia evaluation

Aim:

This study aims to determine patients' perception with the information provided in the pre-operative anesthetic evaluation

Objectives:-

The objective of the study is to assess the percentage of patient perception with the information provided in preoperative anesthesia evaluation

Materials & Methods:-

Study design

The researchers conducted a descriptive-analytical study in Saad Abu El-Ella Hospital in Khartoum and EL-MAK NIMR University Hospital in Sudan, from April 2016 to April 2019, to find the degree of patient's perception with pre-operative anesthesia information.

Study population sampling procedure

The current analytical study recruited about 300 participants, after calculation of the sample size by using the formula.

$$n = \frac{z^2 \times \hat{p}(1-\hat{p})}{\varepsilon^2}$$

The study included all patients with minor or major operations, surgical and gynecology, and obstetric procedures coming requiring anesthesia during the study period. This study excluded participants with Age less than 15 or more than 85 years, unconscious patients for 24 hours after the operation, patients discharged before 24 hours, and the patient refused to participate in the study. The study selected participants by organized simple random technique

Description of Study Procedure

Anesthesia technologists who were not participating in pre-operative anesthesia evaluation, did a direct interview and filled a questionnaire. The study team used a 5-point psychometric (Likert scale) to rate the degree of patient perception. After obtaining consent, the researchers gave all the participants who were coming for pre-operative anesthesia evaluation a validated questionnaire after 24 hours of the surgery and requested to complete it, and provide their responses.

Data collection procedure:

All the questionnaires were anonymous and marked with a number. The study evaluated the participants' perception using a 5-point Likert scale, which indicated to the degrees of satisfaction and presented them in frequency tables and figures.

Statistical analysis:

Data was captured on Microsoft-Excel worksheets and analyzed after editing for completeness. Completed questionnaires were analyzed, and we excluded incomplete ones. The study used a descriptive statistical method to interpret data using frequency and percentage for categorical variables like gender. The research conducted a primary descriptive statistical analysis of 5-point Likert's items and calculated rate, mean, and standard deviation, as well as the percentage of satisfaction of the participant, for each item in the questionnaire. The study measured the responses with the 5-point Likert scale and rated them from (1-5). And they considered A p-value of < less than 0.05 to be significant. The study used the results to support quantitative and qualitative responses.

Results of the study:-

The study included a total of three hundred participants, and the ages ranged from (15-85) years, with the estimated mean of approximately 37.83 years, with a standard deviation of 0.99 {table1}. They were 114 (38.13%) males and 185 (61.87%) females {figure 1}

The study calculated the averages of patient perception with the information given to them in pre-operative anesthesia evaluation, and rated the significant findings according to Likert scale as follow: strongly agree 70 (23.3%), agree, 75 (25%), neutral 76(25.3%) disagree 43 (14.3%) strongly disagree 36 (12%). {Figure 2}

The study compared patient perception according to their ages and made a relationship between the age difference and information .the result showed P. value equal to 0.607. {Table 2 }

The study stated a significant relationship between patient genders and perception with information, and the P. value was 0.00. {Table 3 }.

The study investigated levels of education versus patient perception with the information given in pre-operative anesthesia evaluation and revealed P.value is equal to 0.002. {Table 4 }.

The study analyzed the participants' physical status according to the American Society of the anesthesiologist and found a P-value of 0.002. {Table 5 }.

The study organized the overall participant's response to the items of communication according to Likert's scale and presented in the form of frequency and percentage in {table 6}

Figures and Tables:



Figure 1:- Distribution of participants by Age.



Figure 2:- the averages of patient perception according to the Likert scale.

Table 1:- Distribution of participants by Age in years	(Std. 0.99).	
Characteristic	TOTAL	
Age groups in years	Ν	%
15-30	111	37
31-40	95	31.67
41-60	64	21.33
61-85	30	10
Total	300	100

Table 2:- Patient's perception versus Age.

Age/ satisfaction	SA	Α	Ν	DA	SDA	Total	
	N (%)	N (%)	N (%)	N (%)	N (%)	N (%)	P-value
15—30	11(3.67)	13 (4.33)	30 (10)	32 (10.67)	25 (8.33)	111(37)	
31—40	11(3.67)	6 (2.00)	19 (6.33)	35 (11.67)	24 (8.00)	95 (31.67)	.607
41—60	5 (1.67)	4 (1.38)	19 (6.33)	18 (6)	18 (6.00)	64 (21.33)	
61—85	5 (1.67)	5 (1.67)	7 (2.33)	7 (2.33)	6 (2.00)	30 (10)	
Total	32(10.67)	28 (9.33)	75 (25)	92 (30.67)	73 (24.33)	300 (100)	

 Table 3:- Patient's perception versus gender.

Gender/satisfaction	SA	А	Ν	DA	SDA	Total	P-value
	N (%)	N (%)	N (%)	N (%)	N (%)	N (%)	
Male	12 (4)	10 (3.3)	44 (14.7)	27 (9)	22 (7.3)	114 (38.3)	
Female	20 (6.7)	18 (6)	30 (10)	66 (22)	51 (17)	185 (61.7)	.000
	22(10.7)	20 (0.2)	74 (24 7)	02 (21)	72 (24.2)	200 (100)	-
Total	32(10.7)	28 (9.3)	74 (24.7)	92 (31)	73 (24.3)	300 (100)	

Table 4:- Patient's perception versus Levels of education.

Levels of education/levels	SA	А	Ν	DA	SDA	Total	P-value
of education	N (%)	N (%)	N (%)	N (%)	N (%)	N (%)	
Illiterate	12 (4.1)	8 (2.7)	26 (16.2)	48 (16.2)	43 (14.5)	137 (46.3)	
							.002
Under graduated	9(30)	12 (4 1)	14 (5 1)	15 (16 2)	7 (2 4)	57 (19 3)	
Childer graduated) (3.0)	12 (4.1)	14 (5.1)	15 (10.2)	7 (2.4)	57 (17.5)	
Graduated	8 (2.7	7 (2.4)	22 (8.4)	25 (16.2)	18 (6.1)	80 (27.0)	
Post graduated	3 (1.0)	0 (0.0)	11 (1.4)	4 (16.2)	4 (1.4)	22 (7.4)	
Total	32 (10.8)	27 (9.1)	73 (24 3)	92 (16.2)	72 (24 3)	296 (100)	
10(a)	52 (10.8)	27 (9.1)	75 (24.5)	72 (10.2)	72 (24.3)	270 (100)	

Table5:-	Distribution of	of participants	by Physical	status according to	American society	of anesthesiologist (ASA)
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Characteristic	MALE		FEMALE		Total		P-value
Physical status	Ν	%	N	%	N	%	
ASA1	46	15.54	88	29.73	134	45.3	
ASA2	35	11.82	65	21.96	100	33.8	

ASA3	21	7.09	22	7.43	43	14.5	0.002
ASA4	11	3.72	8	2.70	19	6.4	
Total	113	38.18	183	61.82	296	100	

Communications with	SA	Α	Ν	DA	SD	Total
anesthetist/ satisfaction	N (%)	N (%)				
Anesthetists were	84 (28)	75 (25)	71 (23.7)	42 (14)	28 (9.3	300(100)
punctual and reachable						
Anesthetist introduces	76 (25.3)	86 (28.7)	66 (22)	43 (14.3)	29 (9.7)	300(100)
him/herself very well						
Get Anesthetists	78 (26)	87 (29)	72 (24)	36 (12)	27 (9)	300(100)
approach						
Anesthetists took your	83 (27.7)	90 (30)	67 (22.3)	32 (10.7)	28 (9.3)	300(100)
health history in detail						
Considers your privacy	75 (25)	66 (22)	93 (31)	39 (13)	27 (9)	300(100)
during examination						
Explained your type of	76 (25.3)	77 (25.7)	65 (21.7)	43(14.3)	39 (13)	300(100)
anesthetic care plan						
The information given	62 (20.7)	91 (30.3)	72 (24)	42 (14)	33 (11)	300(100)
was understandable						
Fasting instruction was	81 (27)	66 (22)	78 (26)	37 (12.3)	38 (12.7)	300(100)
clear						
Adequate information	24 (8)	34 (11.3)	98 (32.7)	79 (26.3)	65 (21.7)	300(100)
about postoperative						
analgesia						
Information about PONV	56 (18.7)	66 (22)	74 (24.7)	34 (11.3)	70 (23.3)	300(100)
management was given						
Good understanding of	71 (23.7)	60 (20)	83 (27.6)	57 (19)	29 (9.7)	300(100)
the role the anesthetist						
Enough time to discuss	65 (21.7)	75 (25)	78 (26)	47 (15.6)	35 (11.7)	300(100)
questions						
I was satisfied with my	73 (24.3)	92 (30.7)	75 (25)	28 (9.3)	32 (10.7)	300(100)
anesthetic care plane						
Degree confidence in your	73 (24.3)	86 (28.7)	71 (23.7)	38 (12.6)	32 (10.7)	300(100)
anesthetist						
Average	70(23.3)	75(25)	76(25.3)	43(14.3)	36(12)	300(100)

Table 6:-The overall participant's response to the items of communication according to Likert's scale

Discussion:-

In recent decades, hospitals and their components have faced increasing pressure to deliver their mission in a financially sustainable way to patients who have become intelligent consumers in the medical center. These new states have been challenging for many clinics, including the pre-operative anesthesia clinic.

This study analyzed the perception of patients with the information given to them by anesthesia providers in preoperative anesthesia evaluation and discussed the results and compared the most critical finding with other studies in the same area. Most of these studies supported the hypothesis. They referred to the objectives which assured by the low rate of patient satisfaction with information and communication during pre-operative anesthesia evaluation. However, in this recent study, the result found females were more satisfied regarding the perception of information than males. The study confirmed that educated patients were less confident than illiterates. The study agreed that patients with ASA 4 were less satisfied than ASA1. All these findings arein harmony with a study conducted in Saudi Arabia, which also showed nearly the same in education level and classification of physical status (ASA) the study found female perception was significantly lower than male. Also, patients with ASA I–II considerably had lessawareness than ASA III patients. (Baroudi, Nofal and Ahmad, 2010). The study stressed that university-level educated patients were less aware than others. It showed similarity in finding in a survey conducted in Saudia Arabia. However, the study measured the variables after 24 hours of operation by a modified questionnaire filled by researchers, and in Saudi Arabia, they use a self- administered questionnaire. (Baroudi, Nofal and Ahmad, 2010)

The patients' response to information dealt with in the pre-operative time and the requirement of perception is symmetric with many studies and agreed. They showed less understanding with information about the pre-operative anesthesia area. Participants said anesthesia providers gave insufficient Information—Sjoling's et al. (2015). In a recent study about improving the management of acute post-operative pain priorities for change, the finding agreed with the current research. In which they determined that giving patient information affected the perceptions of the patients and improved their satisfaction with pain management. (Meissner *et al.*, 2015).

Another study showed that pre-operative nursing visits could decrease the level of pre-operative anxiety and postoperative complications in this patient population. Concluded that confirming the discussion of specific patient issues and education would reduce the stress and difficulties in post-operative, which in turn will improve patient satisfaction. Sadat et al. (2013). In most of the studies, they agreed on giving precise information in the preoperative period to satisfy what they expect and very sure to affects the total quality of care. (Chaichian, 2013). In the current study, patients who participated in the study showed their opinion and described the low levels of their perception withinformation. Only 48.3% agreed that information was given as they expect during their care process. The research decided that a lack of knowledge would affect the satisfaction level. In this study, all findings regarding all items of communication mentioned in {table 5}was very low, i.e., only 28% are scored for punctuality, 25.3% respond for explaining the type of anesthesia, and only 20.7% strongly agreed to understand information. The current finding of the study agreed on with a study done by Wahidi in Ethiopia. The anesthetist introduced him/herself to the patients in 31.2% of cases only. The approaches of the anesthetists to the patient were 74.6 %; besides, 50.6 % of the respondents were not given adequate information about anesthesia, 56.2% of the respondent had their type of anesthetic care plan explained to them. In comparison, 61.6% had enough time to discuss questions concerning anesthesia with the anesthetist, and 59.4% showed that the overall proportion of patients who said they were satisfied with anesthesia services at Menelik's second referral hospital was 72.3 % (WAHIDI, 2016).

Another study conducted in Greek patients has reported high satisfaction with perioperative anesthesia care. They seek the interaction between patients and anesthesiologists during all periods of study. Absence of shivering in regional anesthesia and adequate post-operative pain control in the ward were significant predictors and the overall patient satisfaction in anesthesia services rates in the range of 96.3%. (Kouki *et al.*, 2012).

The variation could be becauseof different socio-demographic characteristics of the study design, the absence of standardization during the entry into the pre-operative system, as well as combined with an overall lack of ununified processes of patient care. Without intention contributes to communication insufficiency and patients' general comprehension of a lack of care coordination. (Young, 2017)

The study concluded that measures should be taken to improve patient's information and reinforce the communication of patients with the staff of anesthesia in the pre-operative -anesthesia area.

Conclusion:-

In respect of the following results, considering the degree of average patient's perception with pre-operative anesthesia evaluation, the study observed a significantly shallow awareness. It is essential to revise the policies of health care organizations, increase motivations, as well as stress the preparation of the information booklets, etc., which will educate the patient. The study is suggesting advanced studies to discover factors affecting patients the perception in the pre-operative anesthesia evaluation clinics.

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Conflict of interests

The author has not declared any conflict of interest.

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