

## The degree to which anesthesiologists in particular hospitals in Misurata are aware of patients' anxiety toward regional anesthesia

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### Abstract

One of the main issues for the patient is anxiety, which also leads to psychological, emotional, and physical issues. To assist patients, it is essential to identify their current anxiety. **Study objectives:** The purpose of this study was to evaluate anesthesiologists' perceptions of patients' anxiety during regional anesthesia at Misurata hospitals in Libya. **Methodology:** A survey questionnaire was utilized as the study's research tool. The questionnaire is split into two sections: Part I: comprises of the respondents' profile, which includes six questions such as hospital name, place of work, age, gender, education level, years of experience in the field of anesthesia, and duty. Part II is a four-item assessment measure used by anesthesiologists to assess patients' anxiety during regional anesthesia. Item 1: Anesthesia's perception of the anxiety of patients. Item 2 addressed the causes of patient worry about anesthesia. Item 3 evaluated the patient's pain from terminal anesthesia. Item 4 evaluated the extent to which these strategies were used to alleviate the patient's worry. **Results:** This study included 40 anesthesiologists, the majority (72.5%) of whom were males, and more than half (55%) were between the ages of 31 and 40. According to educational level, 47.5 percent of anesthesiologists held a bachelor's degree and 17.5% held a diploma. Furthermore, roughly 37.5% of anesthesiologists (37.5%) worked in the profession for 5 years, and (80%) worked full-time duty. In our study, we discovered that the majority of anesthesiologists (60%) expressed the greatest concern for patients getting regional anesthetic prior to surgery. Furthermore, 72.5% of anesthesiologists stated that the patient's anxiousness has no effect on the success of

the surgery using regional anesthetic. It was also demonstrated that one of the most prevalent causes of the patient's concern regarding anesthesia is always the consequence of the patient's companions, friends, and family providing misleading information. Also, one of the most common causes was a fear of surgery and needles. The clear majority also ruled out postponing the surgery, and the majority of responses emphasized the use of sedatives, written material, communication skills, encouraging patients to relax, and switching to general anesthesia. **Conclusion:**

In conclusion, the most common reasons of patient anxiety were anesthetic anxiety, misinformation, and surgical operation anxiety. The most prevalent approaches used to control patients' anxiety were relaxation techniques, communication, analgesic drugs, and written information. Regional anesthetic provides effective analgesia, pain relief, and increases patient satisfaction.

**Keywords:** patient anxiety, regional anesthesia, anesthesiologists.

## درجة وعي أطباء التخدير في مستشفيات معينة في مصراتة بقلق المرضى اتجاه التخدير الناحي

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### الملخص

القلق من أهم المشاكل التي يعاني منها المريض، لأنه يسبب مشاكل نفسية بالإضافة إلى مشاكل جسدية. ومن المهم جدا اكتشاف قلق المريض الحالي لمساعدة المرضى. أهداف الدراسة: كان الهدف من هذه الدراسة هو تقييم مدى وعي أطباء التخدير لقلق المرضى تحت التخدير الناحي في مستشفيات مصراتة، ليبيا. منهجية البحث: كانت أداة البحث المستخدمة في الدراسة عبارة عن استبيان مسح. ينقسم الاستبيان إلى جزئين: الجزء الأول: يتكون من ملف تعريف المبحوثين ويتكون من ستة أسئلة تشمل: اسم المستشفى ومكان العمل والعمر والجنس والمستوى التعليمي وسنوات الخبرة في مجال التخدير وفترة العمل. الجزء الثاني: وعي طبيب التخدير لقلق المرضى أثناء التخدير الناحي والذي يتكون من

4 عناصر. البند 1 وعي طبيب التخدير لقلق المرضى. وركز البند 2 على أسباب قلق المريض من التخدير. بينما قيم البند 3 معاناة المريض من التخدير. والبند 4 قام بتقييم مدى استخدام التقنيات لتخفيف قلق المريض. النتائج: تتضمن هذه الدراسة 40 طبيب تخدير. الغالبية (72.5%) منهم من الذكور، وأكثر من النصف (55%) تتراوح أعمارهم بين (31-40) سنة. حسب المستوى التعليمي (47.5%) من أطباء التخدير الحاصلين على بكالوريوس ودبلوم (17.5%). علاوة على ذلك، عمل ما يقرب من سبعة وثلاثين (37.5%) من أطباء التخدير في هذا المجال لمدة 5 سنوات، و (80%) منهم يعملون بدوام كامل. لاحظنا في دراستنا أن غالبية أطباء التخدير (60%) أشاروا إلى أن وقت القلق الأكبر للمرضى الذين يخضعون للتخدير الناحي كان قبل الجراحة. بالإضافة إلى ذلك، أشار 72.5% من أطباء التخدير إلى أن نجاح الجراحة بالتخدير الناحي لا يتأثر بقلق المريض. كما بينت أن من أكثر الأسباب شيوعاً لقلق المريض من التخدير هو دائماً نتيجة إعطاء معلومات خاطئة من رفقاء المريض وأصدقائه وعائلته. بالإضافة إلى ذلك، كان الخوف من الجراحة والإبر أحد أكثر الأسباب الأخرى. استبعدت الغالبية العظمى أيضاً تأجيل الجراحة، وأكدت معظم الإجابات على أنه غالباً ما يتم إعطاء المهدئات، ويتم تقديم معلومات مكتوبة، ويتم استخدام مهارات التواصل، ويتم تشجيع المرضى على الاسترخاء، والتحول إلى التخدير العام. الخاتمة: في الختام، الخوف من التخدير والمعلومات الخاطئة. والخوف من الجراحة من أكثر أسباب قلق المريض شيوعاً. كان التواصل، واستخدام تقنيات الاسترخاء، والأدوية المسكنة، والمعلومات المكتوبة من أكثر الأساليب شيوعاً المستخدمة لإدارة قلق المريض. يوفر التخدير الناحي تسكيناً جيداً ويعزز إرضاء المريض.

**الكلمات الدلالية:** قلق المريض، التخدير الناحي، أطباء التخدير.

## Introduction

Patients who are scheduled for surgical procedures experience varying levels of anxiety due to factors such as the type of surgical procedure, cultural diversity, preoperative information, and previous anesthesia experience. As the anesthesiologist quickly motions a facemask forward, the patient's eyes remain open, transfixed with anxiety. Numbly watching, the patient recalls the

anesthesiologist mentioning "gas combination" and "sevoflurane" two days ago. "This is it, it's going to happen," Several doctors loom over the patient, quietly murmuring, "count down from ten," in the hopes of distracting the patient while the gas takes effect. It is obvious that administering anesthetic medicines via inhalation causes the patient to experience fear and worry. As the countdown progresses, the patient's mind is filled with fear-filled thoughts: "What if I'm not completely asleep throughout the medical procedure? "What if I don't wake up?" Yet, as the anesthesiologist accepts responsibility for the patient's treatment, the eyes will eventually close and the patient will fall into unconsciousness (Amolpreet S, 2021). During surgical procedures, anesthesia relieves the patients' excruciating discomfort. Regional anaesthetic provides several advantages, including convenience of administration, cost effectiveness, and avoidance of risks associated with general anesthetic. A needle injection of local anesthetic as part of a regional anesthetic procedure can be a frightening event. The goal is to produce a tranquil patient who is relaxed and cooperative throughout the surgical procedure (PhilipHu et al., 2007). Regional anesthesia (RA) offers adequate analgesia, which facilitates early rehabilitation and discharge. Current developments in methods and technology for continuous peripheral nerve blocks have reduced dangers, making RA more appealing to both patients and clinicians. Despite this, many patients remain skeptical of the procedure. Fears concerning regional anesthetic include needle pain at the site of administration, being awake during a surgical procedure, paralysis, and backache (Rhee WJ et al., 2010). The anesthesiologist must spend roughly 30-60 minutes explaining the procedures, complications, and other outcome-related components of the treatment to each patient. Some patients may choose to cancel their surgical procedure due to their apprehension about having anesthesia. It has been widely established that a healthy anesthetist-patient relationship is vital for reducing patient anxiety and terror. Patient satisfaction has evolved as an important measure of health outcomes and a major determinant of anesthetic quality (Wu AW, 2010).

Preoperative anxiety is a serious issue for patients since it causes both psychological and emotional issues as well as physical complications. To help patients, it is critical to discover any existing anxiety (Celik, F, Edipoglu I, 2018). Anxiety is an emotional state defined by anxiety and fear caused by the expectation of a potentially dangerous event. Preoperative anxiety may have a significant impact on anesthesia. Nervous people may require a larger dose of anesthetic induction. Furthermore, anxiety might alter unpleasant emotions and threaten overall systems, particularly the endocrine and cardiovascular systems (Uyarel et al., 2006).

A surgical procedure is a traumatic event in a patient's life. Anxiety is prevalent before surgery, with up to 80% of patients experiencing it (Hashimoto Y et al., 1993). Fear of surgical procedure, anesthesia, and consequences (e.g., pain and vomiting), previous negative experience with anesthetics or surgery, or a predisposed personality are common causes of patients' anxiety (Carr E et al., 2006). Last "positive" experiences (with anesthetics or surgical procedures) always result in a more relaxed patient (Kindler CH et al., 2000).

Another key issue that may effect patients' anxiety and overall hospital experience is their expectations of the team's attitude and behavior toward them. Patients' physical recovery, well-being, and entire experience may suffer if they are very nervous and apprehensive about their surgery. Several studies have been conducted to examine various therapies and their impact on patients' anxiety. Pharmacological anxiolytics are used in these therapies. Treatment of distractions and data provision (Bechtold ML et al., 2006). Anesthesiologists' perceptions of their patients' anxiousness vary. There is debate about anesthesiologists' capacity to assess and predict patients' anxiety prior to surgical procedures. According to Badner et al., anesthesiologists are typically wrong in assessing patients' anxiety and frequently underestimate it (Badner NH et al., 1990). They proposed employing additional objective measures of anxiety (e.g., visual analog scale) rather than relying on the care provider's assessment. Nurses also incorrectly assess patients' anxiety, with overestimation being the most common error (Johanna H et al., 1998). In contrast to Badner, clinicians were found to accurately predict patients' anxiety (using clinical judgment) (Hicks

J, Jenkins J, 1988). Several anesthetic approaches are used successfully in orthopedic upper-extremity surgery. Because of the increasing use of ultrasound in daily anesthetic preparation, peripheral nerve blocks have become a common method of anesthesia. The anesthesia approach used separately from the surgical procedure may potentially have an impact on the preoperative anxiety level (Maheshwari, D, Ismail S, 2015).

**Research question:**

The following research questions are established to fulfill the current study's aim: - What is anesthesiologists' perception of patients' anxiety during regional anesthesia?

**The aims:**

The study's aim was to analyze anesthesiologists' perceptions of patients' anxiety while under regional anesthesia in chosen hospitals in Misurata, Libya.

**The objectives:**

- To measure anesthesiologists' perceptions of patients' anxiety while receiving regional anesthesia in Misurata hospitals.
- Recognize the sources of patient anxiety when under regional anesthesia.
- To assess anesthesiologists' impressions of patients' experiences with regional anesthetic block.
- To evaluate anesthesiologists' approaches for dealing with anxiety.

**The Method of Research**

The descriptive research design was used to describe and summarize data in this study. It was utilized to profile and categorize respondents and their responses. This was used to generate an accurate description of the variables under investigation. There were 40 anesthesiologists in total. The respondents worked in a variety of Misurata hospitals (both public and private), including Misurata Central Hospital, Alhekma Hospital, Alzohoor Hospital, Alaml Hospital, and Aljazera Hospital. In 2022, anesthesiologists were given questionnaires. The research looked on the patients' uneasiness while under regional anesthesia. Furthermore, the elements that influence the patients' anxiousness. Furthermore, the years of anesthesia experience and place of employment were included in this study. The data could be utilized to plan how to

control patients' anxiety during regional anesthesia. We also assessed the patients' anxiety while under regional anesthesia in this study. A survey questionnaire was utilized as the study's research tool. The questionnaire is split into two sections: Part I: consists of the respondents' profile, which includes six questions such as hospital name, place of work, age, gender, education level, years of experience in the field of anesthesia, and duty. Part II is a four-item assessment measure that assesses anesthesiologists' perceptions of patients' anxiety during regional anesthesia. Item 1: Anesthesia's perception of patients' anxiety. Item 2 discussed the causes of patient anxiety about anesthesia. Item 3 examined the patient's suffering from terminal anesthesia. Question 4 examined the extent to which these strategies were used to alleviate the patient's anxiety.

#### **Data analysis:**

The collected data was categorised, tabulated, and analyzed. As a statistical tool, the researcher employed frequency and percentage distribution. This type of tool displays the number of observations that fall into each range or the percentage of observations that fall into each range. It is used to determine the prevalence of anesthesiologists' perceptions of patients' anxiety during regional anesthesia in various hospitals in Misurata, Libya. Tables and pie graphs were also employed to describe the research study's findings.

#### **Results and discussion**

The findings helped the researcher make recommendations and learn about anesthesiologists' perceptions of patients' fear during regional anesthesia in Misurata, Libya. Tables and charts are used to present the information gathered from the participants. Part I of the questionnaire addressed the respondents' profile variables, and Part II addressed anesthesiologists' perceptions of patients' anxiety, focused on the reasons for patient anxiety about anesthesia, assessed the patient's suffering with terminal anesthesia, and assessed the extent to which these techniques are used to relieve the patient's anxiety.

#### **Respondents' demography:**

##### **Workplace conditions:**

This study examines anesthetics' awareness of the anxiousness of patients undergoing regional anesthesia. Anesthesiologists made up

the study population. A random sample of 40 people was drawn from the study population. The tables below show the study sample's distribution and features, indicating its diversity and suitability for performing the investigation.

**Table No. (1) Shows the distribution of the study sample according to the work place:**

Work place	Frequency	Percentage
MMC	32	80.0%
Al sharq	4	10.0%
Al hanar	4	10.0%
Total	40	100.0%

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Total	40	100.0%

**Table No. (7) Shows the results of the statistical analysis for the first part**

The question	Count	Percentage	Mean	Std. Deviation	The opinion
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<b>How concerned are you that anxiety is a problem during regional anesthesia</b>	<b>A lot</b>	<b>17</b>	<b>42.5</b>	<b>1.28</b>	<b>0.45</b>	<b>a little</b>
	<b>a little</b>	<b>22</b>	<b>55.0</b>			
	<b>none</b>	<b>1</b>	<b>2.5</b>			
<b>What proportion of your patients underpoing regional anesthesia are anxious patients</b>	<b>most</b>	<b>0</b>	<b>0.0</b>	<b>1.10</b>	<b>0.30</b>	<b>some</b>
	<b>some</b>	<b>36</b>	<b>90.0</b>			
	<b>none</b>	<b>4</b>	<b>10.0</b>			
<b>in your opinion, what is the most concerning time for patients undergoing regional anesthesia</b>	<b>Per op</b>	<b>24</b>	<b>60.0</b>	<b>2.13</b>	<b>0.56</b>	<b>Per op</b>
	<b>intra op</b>	<b>11</b>	<b>27.5</b>			
	<b>post op</b>	<b>5</b>	<b>12.5</b>			
<b>Do you feel perpared to react toward differing types of anxious patients behaviors during regional anesthesi</b>	<b>Alway s</b>	<b>25</b>	<b>62.5</b>	<b>2.28</b>	<b>0.45</b>	<b>always</b>
	<b>Someti mes</b>	<b>15</b>	<b>37.5</b>			
	<b>never</b>	<b>0</b>	<b>0.0</b>			
<b>Does differing advice from surgeon and anesthesiologist</b>	<b>No</b>	<b>15</b>	<b>37.5</b>	<b>1.70</b>	<b>0.65</b>	<b>Yes</b>

regarding the various anesthetic techniques increase patients anxiety	Yes	25	62.5			
How accurately do you think you assess your level of confidence in performing the block	Overestimate it	10	25.0	1.95	0.68	underestimate it
	underestimate it	22	55.0			
	correctly it	8	20.0			
Dose patient anxiety have any effect on your anxiety	No	27	67.5	1.33	0.47	No
	Yes	13	32.5			
Dose patient anxiety have any effect on your level of confidence in performing block	No	30	75.0	1.25	0.44	No
	Yes	10	25.0			
Dose patient anxiety have any effect on the success of the block itself	No	29	72.5	1.28	0.45	No
	Yes	11	27.5			
How important is patient satisfaction to your practice	High	36	90.0	1.10	0.30	High
	Low	4	10.0			
How often do you track your patients satisfaction after a procedure under regional anesthesia	never	4	10.0	2.13	0.56	often
	often	27	67.5			
	always	9	22.5			

First, anesthetics' perception of patients' anxiety:

Based on the results in the previous table, we can conclude:

- 1) In response to the first question (How concerned are you that anxiety will be an issue during regional anesthesia), the majority of the study group reports anxiety.
- 2) In response to the second question (what proportion of your nervous patients have regional anesthetic), we discover that the majority of the study group says that some are.
- 3) In response to the third question (in your opinion, what is the most frightening period for patients undergoing regional anesthesia), the majority of the study sample says it is before the surgery.
- 4) In response to the fourth question (Do you feel prepared for any different reaction of worried patients during regional anesthesia), the majority of the survey participants said they are always prepared.
- 5) In response to the fifth question (Is the difference in advice from the surgeon and the anesthesiologist concerning different anesthesia techniques give patients anxiety), the majority of the study group says yes.
- 6) In response to the sixth question (how accurate is your estimate of patients' anxiety before mid-anesthesia), the majority of the study group expresses some gratitude.
- 7) In response to the seventh question (Does the patient's anxiety affect your anxiety? ), the majority of the study participants respond no.
- 8) In response to the eighth question (Does the patient's anxiety affect your level of confidence in conducting spinal anesthesia? ), the majority of the study group says no.
- 9) In response to the ninth question (Does the patient's anxiety affect the success of the regional anesthetic itself), the majority of the study group says no.
- 10) In response to the tenth question (How important is patient satisfaction with your practice), the majority of the study sample says it is very important.
- 11) In response to the eleventh question (to what extent are patients satisfied following the surgery under regional anaesthetic), we

discover that the majority of the study sample reports frequent contentment.

**Second, one of the causes of the patient's anxiety about anesthesia is:**

This section was researched in the study population by the study sample to investigate the question (what are the causes of the patient's anxiety following anesthesia).

And each paragraph of the questionnaire linked to this question was investigated using the necessary statistical analysis. Furthermore, the calculations were performed using the statistical program SPSS, and the results are displayed in Table No (8).

**Table No. (8) Shows the results of the statistical analysis for the second part**

The question		Count	Percent	Mean	Std. Deviation	The opinion
needle phobia	Often	29	72.5	2.28	0.45	often
	Always	11	27.5			
fear of unknown	Never/ rarely	16	40.0	1.70	0.65	often
	Often	20	50.0			
	Always	4	10.0			
fear of the surgery	Never/ rarely	7	17.5	2.13	0.69	often
	Often	21	52.5			
	Always	12	30.0			
fear of the anesthesia	Never/ rarely	5	12.5	2.00	0.51	often
	Often	30	75.0			
	Always	5	12.5			
recall of pervious bad experience	Never/ rarely	11	27.5	1.95	0.71	often
	Often	20	50.0			



	Always	9	22.5			
fear of complications (pain / nerve damage)	Never/ rarely	11	27.5	1.85	0.62	often
	Often	24	60.0			
	Always	5	12.5			
regional anesthesia might make operation less successful	Never/ rarely	29	72.5	1.30	0.52	Never/ rarely
	Often	10	25.0			
	Always	1	2.5			
giving patients detailed anesthetic information per-op	Never/ rarely	16	40.0	1.85	0.80	Never/ rarely
	Often	14	35.0			
	Always	10	25.0			
giving patients little anesthetic information pre-op	Never/ rarely	18	45.0	1.68	0.69	Never/ rarely
	Often	17	42.5			
	Always	5	12.5			
misinformation from lay people family friends and surrounding media	Never/ rarely	6	15.0	2.28	0.72	often

According to the findings in the preceding table: 1) On the first question (fear of needles), the majority of the study sample reports that this occurs frequently.

2) In response to the second question (fear of the unknown), we discover that the majority of the study group believes this occurs frequently.

3) When it comes to the third question (fear of surgery), the majority of the survey participants claim it happens frequently.

4) In response to the fourth question (fear of anesthesia), the majority of the study sample reports that this occurs frequently.

5) In response to the fifth question (remember earlier terrible experiences), the majority of the study sample reports that this occurs frequently.

6) In response to the sixth question (fear of complications (pain - nerve injury), the majority of the study sample reports that this occurs frequently.

7) In response to the seventh question (does regional anesthetic decrease the success of the operation), we discover that the majority of the study population believes this rarely occurs.

8) In response to the eighth question (providing patients full information before surgery), the majority of the study group reports that this occurs only infrequently.

9) In response to the ninth question (providing patients minimal information about anesthesia before the procedure), we discover that the majority of the survey group states that this occurs rarely.

10) In response to the tenth question (providing misleading information from the patient's companions, friends, family, and the surrounding media environment), the majority of the study sample reports that this occurs frequently.

### **Third, regional anaesthetic contributes to some of the patient's discomfort:**

This section was examined in the study population via the study sample to study the question that states (Is there a patient suffering from regional anesthesia), and this question was studied for each paragraph of the questionnaire connected to this question via the necessary statistical analysis. All the computations were done using the statistical software SPSS. The outcomes are shown in the table (9).

**Table No. (9) Shows the results of the statistical analysis for the third part**

The question		Cou nt	Perce nt	Mean	Std. Devia tion	The opinion
patients find the block unpleasant	Never/ rarely	23	57.5	1.50	0.64	Never/ rarely
	Often	14	35.0			
	Always	3	7.5			

patients remember the events during the block	Never/ rarely	10	25.0	1.78	0.48	often
	Often	29	72.5			
	Always	1	2.5			
patients experience pain during the block	Never/ rarely	20	50.0	1.58	0.64	Never/ rarely
	Often	17	42.5			
	Always	3	7.5			
patients experience pain during surgery	Never/ rarely	26	65.0	1.50	0.75	Never/ rarely
	Often	8	20.0			
	Always	6	15.0			
patients have adequate pain relief after surgery	Never/ rarely	3	7.5	2.38	0.63	Often
	Often	19	47.5			
	Always	18	45.0			
Following regional anesthesia patients would have a block again	Never/ rarely	22	55.0	1.65	0.80	Never/ rarely
	Often	10	25.0			
	Always	8	20.0			
patients are satisfied with the block	Never/ rarely	1	2.5	2.30	0.52	often
	Often	26	65.0			
	Always	13	32.5			

According to the findings in the preceding table, 1) On the first question (the patient finds regional anesthetic painful), the majority of the study sample says that this rarely occurs.

2) In response to the second question (whether patients remember events during regional anaesthetic), the majority of the study sample reports that this occurs frequently.

3) In response to the third question (the patient experiences pain during regional anesthesia), we discover that the majority of the study group believes this occurs only infrequently.

4) In response to the fourth question (the patient has postoperative discomfort), we discover that the majority of the study group believes this occurs only infrequently.

5) In response to the fifth question (whether patients receive enough pain relievers after surgery), we see that the majority of the study group believes this is always the case.

6) With regard to the sixth question (the patient may choose to repeat it after regional anesthesia), we discover that the majority of the study group says that this rarely occurs.

7) In response to the seventh question (if patients are satisfied with regional anesthetic), we discover that the majority of the study population believes this occurs frequently.

#### **Fourth, a portion of the techniques used to alleviate the patient's anxiety:**

This section was researched in the study population by the study sample to answer the question (to what extent are procedures used to alleviate the patient's anxiety). By the necessary statistical analysis, this question was analyzed for each paragraph of the questionnaire connected to this question. The calculations were performed using the statistical program SPSS, and the results are displayed in table (10).

**Table No. (10) Shows the results of the statistical analysis for the fourth part**

The question		Count	Percent	Mean	Std. Deviation	The opinion
Do nothing	Never/ rarely	32	80.0	1.20	0.41	Never/ rarely
	Often	8	20.0			
Give sedation	Never/ rarely	5	12.5	1.98	0.48	often
	Often	31	77.5			
	Always	4	10.0			
Written information /leaflet	Never/ rarely	13	32.5	1.90	0.74	often
	Often	18	45.0			
	Always	9	22.5			
Postpone the operation	Never/ rarely	30	75.0	1.28	0.51	Never/ rarely
	Often	9	22.5			
	Always	1	2.5			
Communication/	Never/ rarely	3	7.5	2.33	0.62	often
	Often	21	52.5			

reassurance/ tell a joke	Always	16	40.0			
Convert to general anesthesia	Never/ rarely	17	42.5	1.63	0.59	Never/ rarely
Distraction (music /read/ book)	Never/ rarely	23	57.5	1.58	0.75	Never/ rarely
	Often	11	27.5			
	Always	6	15.0			
Partner attendance (partner/ friend/ relative)	Never/ rarely	29	72.5	1.30	0.52	Never/ rarely
	Often	10	25.0			
	Always	1	2.5			
Patients watching a video about regional anesthesia	Never/ rarely	35	87.5	1.13	0.33	Never/ rarely
	Often	5	12.5			
Patients watching the procedure via operating camera	Never/ rarely	38	95.0	1.05	0.22	Never/ rarely
	Often	2	5.0			
Encourage them to relaxation techniques (deep breathing/ meditation)	Never/ rarely	9	22.5	1.93	0.62	Often
	Often	25	62.5			
	Always	6	15.0			
In peripheral nerve blockade patient seeing their nerves while being anesthetized on ultrasound screen	Never/ rarely	21	52.5	1.53	0.60	Never/ rarely
	Often	17	42.5			
	Always	2	5.0			

According to the data in the previous table, we can conclude that:

- 1) On the first question (I do nothing), the majority of the study sample says that this rarely occurs.
- 2) In response to the second question (providing painkillers), we discover that the majority of the survey population believes this occurs frequently.
- 3) In response to the third question (I offer him written information), we discover that the majority of the study group believes this occurs frequently.
- 4) In response to the fourth question (I postpone the surgery), the majority of the study sample reports that this occurs frequently.
- 5) In response to the fifth question (employ communication skills, reassurance, and delivering jokes), the majority of the study sample reports that this occurs frequently.
- 6) In response to the sixth question (switching to general anesthesia), we discover that the majority of the study population believes this occurs infrequently.
- 7) In response to the seventh question (distracting the patient's attention (music / reading / book)), the majority of the study sample states that this occurs only seldom.
- 8) In response to the eighth question (presence of relatives (spouse / wife / friend / relative)), the majority of the study sample states that this occurs only infrequently.
- 9) In response to the ninth question (the patient watches a movie about general anesthesia), we discover that the majority of the study sample believes this rarely occurs.
- 10) In response to the tenth question (the patient seeing the procedure through the operation camera), we discover that the majority of the study population believes this occurs infrequently.
- 11) In response to the eleventh question (encouraging patients to use relaxation techniques (deep breathing / meditation), the majority of the study sample reports that this occurs frequently.
- 12) In response to the twelfth question (in the case of general anesthesia, the patient sees his nerves on the ultrasound screen during his anesthesia), the majority of the study sample says that this rarely occurs.

### **The summary of the findings:**

This study included 40 anesthesiologists, the majority (72.5%) of whom were men, and more than half (55%) were between the ages of 31 and 40. According to educational level, 47.5 percent of anesthesiologists held a bachelor's degree and 17.5% held a diploma. Furthermore, roughly 37.5% of anesthesiologists (37.5%) worked in the profession for 5 years, and (80%) worked full-time duty. In our study, we discovered that the majority of anesthesiologists (60%) expressed the greatest anxiety for patients getting regional anesthetic prior to surgery. Also, 62% of anesthesiologists verified their readiness to respond to any response from patients. They stated that patients are anxious since the surgeon and anesthesiologist give contradictory instructions about different anesthetic approaches. Furthermore, 72.5% of anesthesiologists stated that the patient's anxiety had no effect on the success of the surgery with regional anesthetic, and they underlined the importance of patient satisfaction with the surgery. The vast majority of anesthesiologists (67.5%) responded that the patient was mostly satisfied with the regional anaesthetic after the procedure. This study also revealed that one of the most common causes of a patient's anxiety over anesthesia is the patient's companions, friends, and family providing misleading information. Also, one of the most common causes was a fear of surgery and needles. Several anesthesiologists ruled out the possibility that regional anesthetic would reduce surgical success by 72.5%. The level of the patient's discomfort with regional anesthetic was also assessed in this study. The vast majority of anesthesiologists ruled out the possibility that patients find regional anesthetic uncomfortable or that they experience pain during or after operation. A large percentage of doctors stated that patients are always given enough pain medications following surgery. Furthermore, the patients remember the events that occurred under the regional anesthetic and are delighted with the regional anesthesia. This survey also highlighted the tactics used to lessen the patient's fear, with 80% of anesthesiologists confirming that they do nothing at all and excluding their attempts to distract the patient's attention through reading, music, or other means, such as the presence of family. They

also ruled out the possibility of the patient watching a video of anesthesia or the surgery through the operation camera, or of the patient seeing his nerves on the ultrasound screen during anesthesia. The clear majority also ruled out postponing the surgery, and the majority of responses emphasized the use of sedatives, written material, communication skills, encouraging patients to relax, and switching to general anesthesia.

### Discussion

According to Vaughn F et al., 2007, preoperative anxiety has a significant impact on postoperative pain. This was not validated in this investigation, which found no link between patient anxiety and postoperative pain. Our study found that the techniques used to reduce patients' anxiety from regional anesthesia are written information, communication skills, and analgesics, with the majority of anesthesiologists excluding the use of video; however, the (Amolpreet S, 2021) study emphasized the use of these methods, in addition to showing patients a video of regional anesthesia. A study (Jarmoszewicz K et al., 2020) confirmed what we found in our study, as the two studies show that patients' anxiety before surgery is greater than their anxiety after surgery. According to the study (Liu W et al., 2021), the environment surrounding the patient and ignorance about regional anesthesia are two of the most major sources of patient anxiety, and our current investigation confirms this. Our study also confirmed what Bheemanna N et al., 2017 found: patients' anxiety stems from a lack of awareness about regional anesthesia and a fear of the unknown. Savas A, 2020 emphasizes the necessity for larger studies on the influence of ADA on preoperative anxiety in patients, and Jlala H et al., 2010 study confirmed that females are more worried about regional anesthetic than males. Communication was the primary approach employed by anesthesiologists to manage patient anxiety, according to Jlala H et al., 2010. A thorough explanation of the benefits and hazards, as well as consistent communication and reassurance throughout the operation, would help to create rapport, build confidence and trust, and ease anxieties.



### Conclusion:

In conclusion, the most common causes of patient anxiety were fear of anesthesia, misinformation, and fear of surgical procedure. The most popular approaches utilized to address patients' anxiety were communication, relaxation techniques, analgesic drugs, and written information. Regional anesthetic provides good analgesia while also increasing patient satisfaction.

### Recommendations:

- 1- During their usual preoperative anesthesia examination, all patients undergoing surgery should be evaluated for the presence of anxiety, and patients who are found to have a high degree of anxiety should be booked for an additional counseling session with an anesthetist. This measure helps to reduce anxiety and aids in making a sensible decision about the anesthesia approach to use.
- 2- Conduct future studies among patients to accurately assess patients' anxiety during surgical procedures requiring anesthesia.
- 3- Create a checklist to assess patients' anxiety before surgery as part of preoperative patient preparation.
- 4- Improved communication abilities of anesthesiologists through educational courses, training, and workshops.
- 5- Larger-scale research is required.

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