ORİJİNAL ARAŞTIRMA ORIGINAL RESEARCH

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The Effect of BATHE Method on Preoperative Anxiety, Patient Satisfaction and Individual Anesthesia Concerns: Randomized, Placebo-Controlled, Clinical Trial

BATHE Metodunun Preoperatif Anksiyete, Hasta Memnuniyeti ve Bireysel Anestezi Endişeleri Üzerine Etkisi: Randomize, Plasebo-Kontrollü Klinik Çalışma

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ABSTRACT Objective: The aim of this study is to determine the causes of concern among the patients who will undergo elective surgical operations and receive general anesthesia, to gauge their preoperative anxiety levels and to study the effects of the BATHE method on preoperative anxiety and patient satisfaction. **Material and Methods:** Five hundred adult patients who were planned to undergo elective surgery with general anesthesia were included in the study. Before the preoperative examination, demographic data of all patients, their three biggest fears about anesthesia and Amsterdam Preoperative Anxiety and Information Scale (APAIS) scores were recorded. Then, the patients were divided into two groups with a closed envelope randomization method with 250 patients in each. The patients underwent BATHE anamnesis or standard anamnesis methods according to their groups, then their APAIS and patient satisfaction scores were recorded. **Results:** The most feared cause of anesthesia in all patients was "not waking up after surgery". The APAIS anxiety score was found to be higher in women, young people, married people with children, people with no prior anesthesia experience and people with a higher degree of education. Anxiety values were found to be higher in gynaecology patients and obstetrics. The difference between APAIS scores before and after the examination was higher in the group using the BATHE method during the preoperative visit compared to the standard anamnesis group. The patient satisfaction score of the patients in the BATHE group was higher than the standard anamnesis group. **Conclusion:** We concluded that the inclusion of BATHE interview technique in preoperative examination may reduce preoperative anxiety.

Keywords: Anxiety; anesthesia; patient satisfaction

ÖZET Amaç: Bu çalışmada; elektif cerrahi operasyon geçirecek ve genel anestezi alacak hastalarda anesteziye dair endişe nedenlerini belirlemek, bu hastaların preoperatif anksiyete düzeylerini ölçmek, preoperatif muayenede BATHE görüşme tekniği uygulanmasının preoperatif anksiyete ve hasta memnuniyeti üzerine etkilerini araştırmak amaçlanmıştır. **Gereç ve Yöntemler:** Elektif şartlarda cerrahi planan ve anestezi yöntemi olarak genel anestezi uygulanacak 500 erişkin hasta çalışmaya dâhil edildi. Preoperatif muayene öncesi tüm hastaların demografik verileri, anesteziye dair en çok korktukları 3 neden ve Amsterdam Preoperatif Anksiyete ve Bilgi Ölçeği [Amsterdam Preoperative Anxiety and Information Scale (APAIS)] skorları kaydedildi. Daha sonra hastalar kapalı zarf randomizasyon yöntemi ile 250 kişilik 2 gruba ayrıldı. Bulundukları gruplara göre BATHE anamnez veya standart anamnez yöntemleri uygulanan hastaların muayene çıkışında APAIS ve hasta memnuniyet skorları kaydedildi. **Bulgular:** Tüm hastalarda anesteziye dair en çok korkulan neden; "ameliyat sonrası uyanmamak" idi. Kadınlarda, genç yaş grubunda, evli ve çocuk sahibi olanlarda, daha önceden anestezi deneyimi olmayanlarda ve eğitim durumu yüksek olanlarda APAIS anksiyete skorları daha yüksek bulunmuştur. Cerrahi bölüm olarak ise obstetrik ve jinekoloji hastalarında anksiyete değerleri daha yüksek görülmüştür. Preoperatif vizit sırasında BATHE methodu kullanılan grubun muayene öncesi ve sonrası APAIS skorları arasındaki fark standart anamnez uygulanan gruba göre daha yüksek bulunmuştur. Yine BATHE grubundaki hastaların hasta memnuniyet puan ortalaması standart anamnez grubuna göre daha yüksek bulunmuştur. **Sonuç:** Preoperatif muayeneye BATHE görüşme tekniğinin dâhil edilmesinin preoperatif anksiyeteyi azaltabileceği kanaatine vardık.

Anahtar Kelimeler: Anksiyete; anestezi; hasta memnuniyeti

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Preoperative anxiety can be defined as unrest or bad feeling that develops against the patient's disease, hospitalization, anesthesia and surgery.[1] This anxiety adversely affects surgery, anesthesia and postoperative recovery.[2] In some studies, patients with anxiety say that they require a higher dose of anesthetic medication in the intraoperative period.[1,3] Patients have anxiety due to many causes; in addition to general worries such as health and concerns about surgery, uncertainty of situation, moving away from home, staying away from daily work, there are also concerns related to anesthesia such as inability to wake up after surgery, waking up during surgery, postoperative pain, and staying in intensive care unit.[4] It has been reported that 60-80% of the patients have anxiety in the preoperative period.[5,6]

A variety of methods are used to reduce anxiety levels in patients. The interview conducted by the anesthesiologist in the preoperative period and the information given in this interview and the drugs used for premedication are some of them.[7] It has been shown that informing patients in the preoperative period reduces anxiety and analgesic requirements and increases satisfaction.[8] When the patient was informed about the procedure performed at each stage and why, it was observed that the anxiety levels of the patients decreased.[9] Listening to the patient's anxiety and worries strengthens their ability to cope with anxiety. In the recognition of patient psychology, it is important to know the degree of anxiety and the causes of anxiety, the nature of the disease, anesthesia application, surgical intervention, and sufficient information so as not to increase anxiety about postoperative period. In this context, the BATHE method developed by Stuart and Lieberman, modified by Hepner et al. is used for preoperative examination.[10-13] This is a 15-minute psychotherapy method that includes specific questions or comments that physicians can include in a standardized examination interview with patients. The BATHE method is an acronym for: Background, Affect, Trouble, Handling, Empathy) (Table 1). With this method, patients can express themselves more easily, and they can get information about their diseases more easily. In addition, this method allows physicians to empathize with their patients. There are several studies showing that the use of BATHE method in preoperative examination reduces patients' anxiety and increases patient satisfaction.[14,15] In this study, the goal is to determine the causes of concern among the patients who will undergo surgical operations and receive general anesthesia, to gauge their preoperative anxiety levels and to study the effects of the BATHE method on preoperative anxiety and patient satisfaction.

MATERIAL AND METHODS

SAMPLE

This randomized, placebo-controlled, clinical study was conducted between January 1 2018 and December 31, 2018, after the approval of Sivas Cumhuriyet University Clinical Research Ethics Committee with the number of 2017/12-02 and written consents of the patients were obtained. The study was designed in accordance with the 2008 Helsinki Declaration. Patients that have elective surgery with general anesthesia were included in the study. This was a questionnaire study planned for 500 adult patients with the classification of American Society of Anesthesiologists (ASA) I-II, aged between 18-70 years.

TABLE 1: Specific questions of the BATHE interview technique.

		Original key questions	Key questions for preoperative examination
B	Background	How is your life going?	What brought you here today?
A	Affect	How do you feel about your situation?	What did you feel when you were told that you would undergo surgery?
T	Trouble	Does anything concern you about your current situation?	What concerns you the most about surgery?
H	Handling	How do you cope with it?	What did you do to alleviate this concern?
E	Empathy	This must be hard for you	You're right to be concerned, this is very normal. Now I will give you some information about surgery and anaesthesia.

ASA I-II patients, aged between 18-70 years, who applied to the anesthesia outpatient clinic between January 1, 2018 and May 1, 2018, both patients who will undergo any type of surgery, and patients who were decided to undergo general anesthesia were included in the study. Randomization was based on a computer-generated code that was prepared at a remote site and sealed in opaque, sequentially numbered envelopes. Randomization was based on blocks of 500 patients using randomly sealed envelopes.

Other than ASA I-II patients, illiterate patients, patients with known psychiatric disorders, patients with chronic sedative, antipsychotic drug use, patients with a history of going to psychiatry in the last year, patients with any cancer diagnosis were not included in the study.

DATA GATHERING TOOLS

The questionnaire consisted of 2 parts: pre and postoperative examination. In the first part before the examination, the patients were asked to fill in the part that included demographic information (age, gender, marital status, child status, education level, income level, tobacco and alcohol use, history of anesthesia, inpatient clinic). They were then asked to select the three most frightening reasons in the list, respectively, from the list of causes of anxiety related to anesthesia (Table 2). Finally, they were asked to complete the Amsterdam Preoperative Anxiety and Information Scale (APAIS) form to measure preoperative anxiety levels (Table 3).

APAIS developed by Moerman et al. has a widespread use in this field.[16] In this test, the concern was divided into the concern of surgery and the concern of anesthesia. It includes 6 statements for these 2 sources to assess anxiety. In order to objectify the survey, each statement is given a numerical value based on a 5-point Likert scale based on force; these values ranging from 1-5 are expressed as 1=none, 2=mild, 3=moderate, 4=severe, 5=extremely severe. Anxiety due to anesthesia (AA) is calculated by adding scores to 1st, 2nd and 3rd expressions, anxiety due to surgery (AS) to 4th, 5th and 6th expressions, and

TABLE 2: Causes of anxiety related to anaesthesia.

1. The anaesthesist not being competent enough	8. Post-op nausea
2. The anaesthesist not being experienced enough	9. The attitude of the anaesthesist
3. Not being able to wake up after the surgery	10. Staying in intensive care
4. Feeling post-op pain	11. Being asleep for a long period after the surgery
5. The anaesthesist not being present in the room	12. Needle fear
6. Waking up during the operation	13. The personell causing problems
7. Relatives having negative views about anaesthesia	14. Overapplication of anaesthetic drugs

TABLE 3: Amsterdam Preoperative Anxiety and Information Scale.

APAIS	None	Mild	Moderate	Severe	Extremely severe
1. I'm anxious about anaesthesia					
2. I constantly think about anaesthesia					
3. I'd like to acquire as much information as possible about anaesthesia					
4. I'm concerned about the surgical procedure					
5. I constantly think about the surgical procedure					
6. I'd like to acquire as much information as possible about the surgical procedure					

APAIS: Amsterdam Preoperative Anxiety and Information Scale.

total anxiety (TA) score is calculated by adding both.[16] While the lowest score is 3 and the highest score is 15 in the calculation of anesthesia and surgical anxiety score, the lowest score is 6 and the highest score is 30 in the total anxiety score.[16]

The patients who completed the first part of the questionnaire before the examination were divided into 2 groups of 250 people by closed envelope randomization method; BATHE anamnesis (BA) and standard anemnesis satisfaction survey is a mini questionnaire in which patients evaluate their physicians. When evaluating their physicians, patients give 1 to 5 points according to the 5-point Likert scale. Then the sum of the values given to each expression shows the patient's satisfaction score. This value is minimum 12 maximum 60.

DATA ANALYSIS

Since the data gathered from our study was uploaded to the SPSS for Windows version 24.0 (SPSS Inc., Chicago, IL, ABD) program and parametric test assumptions were done (Kolmogorov-Smirnov) when measurements taken from two independent groups are compared, the independent t-test was used. When 2 measurement values taken from the same individuals at different times and conditions are compared, the paired samples t-test was used. Variance analysis (one way ANOVA) was used when comparing data obtained from more than 2 groups independent of a variable obtained by measurement. Tukey test was used to find the groups or groups that made a difference when the significance decision was made. Chi-square test was used to evaluate the data obtained by counting. The error level was taken as 0.05. In this study, when α=0.05 β=0.10 1-β=0.90, it was decided to add 250 individuals to each group and the power of the test was found to be p=0.9407.

RESULTS

Of the 250 patients in the SA group participating in the study, 130 (52%) were male and 120 (48%) were female. Of the 250 patients in the BA group, 134 (53.6%) were male and 116 (46.4%) were female. Of the 250 patients in the SA group participating in the study, 85 (34%) were between the ages of 18-29, 78 (31.2%) were 30-44 years old, 65 (26%) were 45-59 years old, 22 (8.8%) were over 60 years old.

Seventy three (29.2%) of 250 patients in the BA group were between the ages of 18-29, 86 (34.4%) were between the ages of 30-44, 67 (26.8%) were between 45-59 years old, 24 (9.6%) were over 60 years old.

Of the 250 SA group patients who participated in the study, 27 (10.8%) were urology, 44 (17.6%) orthopedics, 10 (4%) plastic surgery, 22 (8.8%) neurosurgery, 62 (24.8%) general surgery, 23 (9.2%) gynecological patients, 62 (24.8%) otolaryngology (ENT) patients. Of the 250 patients in the BA group, 21 (8.4%) were urology, 42

TABLE 4: Patient satisfaction form.

	Very bad	Bad	Moderate	Good	Very good
Listening to you	1	2	3	4	5
Dealing with your particular situation	1	2	3	4	5
Making it easier for you to tell them about your problems	1	2	3	4	5
Your examination	1	2	3	4	5
Giving you the information you want about your complaints or illness	1	2	3	4	5
Explaining the aims of tests and treatments	1	2	3	4	5
Including you in decisions about your medical care	1	2	3	4	5
Helping you feel good	1	2	3	4	5
Helping you deal with emotional problems related to your health	1	2	3	4	5
Making you feel you have enough time during interviews	1	2	3	4	5
Ability to empathize with you	1	2	3	4	5
Their competence	1	2	3	4	5

(16.8%) orthopedics, 10 (4%) plastic surgery, 26 (10.4%) neurosurgery, 62 (24.8%) general surgery, 23 (9.2%) gynecological patients and 66 (26.4%) ENT patients.

When the mean values of APAIS-AA, APAIS-AS and APAIS-TA of the individuals were compared according to the inpatient service, the difference was found to be significant ($p<0.05$). The 3 branches with the highest mean values of APAIS-AA, APAIS-AS, and APAIS-TA were observed as obstetrics, ENT and neurosurgery, respectively (Figure 1).

According to the socio-demographic characteristics of the patients included in our study, no significant difference was found in terms of distribution of socio-demographic data between the groups. When the fears of anesthesia of the 500 patients included in the survey were examined, the three most feared causes were; not waking up after surgery, waking up during surgery and staying in intensive care. In our study, according to the APAIS questionnaire conducted before the anesthesia examination and information, the average APAIS-AA of the 500 participants was 9.95; APAIS-AS 12.6; APAIS-TA was found to be 22.55. Furthermore, surgical anxiety scores of all patients being higher than anesthesia anxiety scores are noteworthy.

As a result of our survey, APAIS-AA, APAIS-AS and APAIS-TA scores were found to be higher in women, young people, married people with children, tobacco users, people without previous anesthesia experience and people with a high educational status (Table 5) ($p<0.05$).

When the APAIS scores of the patients whose preoperative examination was completed using SA or BA method were compared with the APAIS scores before the preoperative examination according to the group they were found, APAIS-AA, APAIS-AS and APAIS-TA values of the patients in the BA group were decreased after the examination (Figure 2) ($p<0.05$). The difference between anxiety scores was higher (Table 6). In both groups, AA scores decreased more than AS scores.

In the patient satisfaction questionnaire, where the patients evaluated their physicians after the examination, we found that the average satisfaction score of the BA group as 56.0240 and the average satisfaction score of the SA group as 40,9560 (Figure 3) ($p<0.05$).

DISCUSSION

Patients who are supposed to have surgery are now under stress from both anesthesia and surgery. In many studies on preoperative anxiety, anxiety levels of patients were found to be high.[17-19] In 2 separate studies conducted by Turzáková et al. and Bakalaki et al., APAIS-AS scores were higher than APAIS-AA

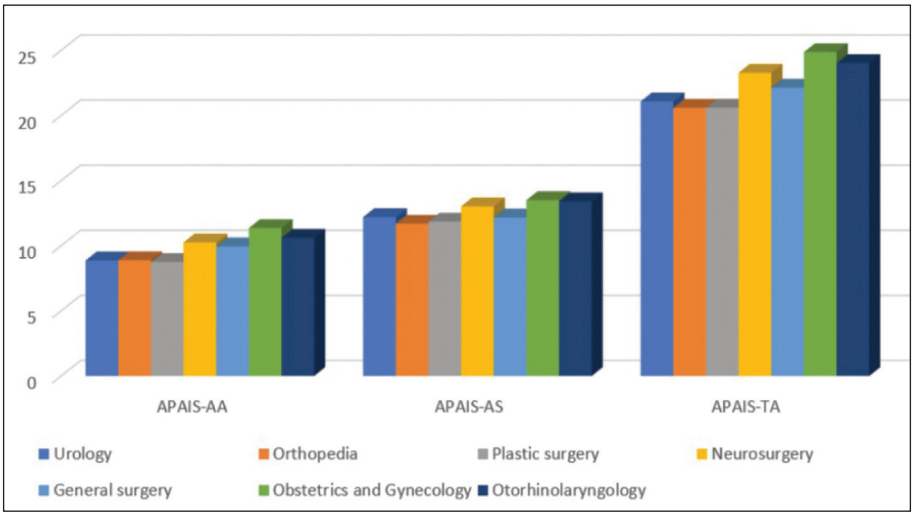

FIGURE 1: Amsterdam Preoperative Anxiety and Information Scale anesthesia anxiety score, surgical anxiety score, total anxiety score according to surgical departments. AA: Anxiety due to anesthesia; AS: Anxiety due to surgery; TA: Total anxiety.

TABLE 5: General anxiety levels of the patients.

The anxiety level of all patients (500 patients) general anxiety values	Initial AA average	Initial AS average	Initial TA average	p value
Age				
18-29	10.4177	13.1139	13.1139	**0.001***
30-44	10.1402	12.8171	12.8171	
45-59	9.6742	12.2045	12.2045	
>60	8.4565	11.2391	11.2391	
Gender				
Female	11.4661	13.4280	24.8941	**0.001***
Male	8.5947	11.8674	20.4621	
Marital status				
Married	10.4370	13.0667	23.5037	**0.001***
Single	9.7699	12.4329	22.2027	
Children				
Have	10.4567	13.2356	23.6923	**0.001***
Don't have	9.5890	12.1541	21.7432	
Degree of education				
Elementary	9.7561	12.2195	21.9756	**0.001***
Middle school	9.7900	12.4103	22.1103	
High school	9.8341	12.6413	22.4753	
Graduate	10.2750	12.9250	23.2000	
Post graduate	10.7368	13.2105	23.9474	
Tobacco use				
Yes	10.6008	13.0847	23.6855	**0.001***
No	9.3095	12.1310	21.4405	
Anaesthesia experience				
Yes	9.7391	12.3676	22.1067	**0.001***
No	10.1660	12.8462	23.0121	
All patients sum	9.9500	12.6040	22.5540	**0.001***

AA: Anxiety due to anesthesia; AS: Anxiety due to surgery; TA: Total anxiety.
*p<0.001: statistically significant.

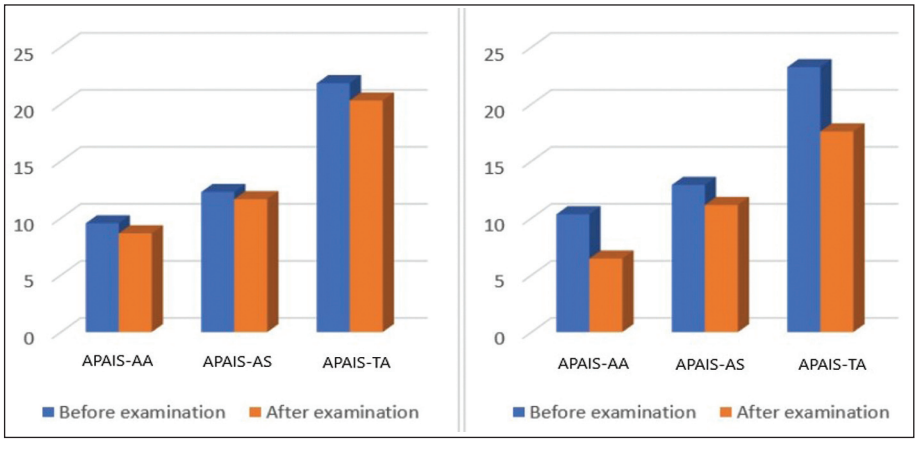

FIGURE 2: Change of Amsterdam Preoperative Anxiety and Information Scale scores according to interview technique. AA: Anxiety due to anesthesia; AS: Anxiety due to surgery; TA: Total anxiety.

TABLE 6: The comparison of the groups' pre and post examination APAIS scores.

	Anxiety average	Average difference	p value
Standart anaesthesia group			
Initial AA	9.5462	0.88353	**0.001***
Final AA	8.6627		
Initial AS	12.2960	0.63200	**0.001***
Final AS	11.6640		
Initial TA	21.8313	1.51807	**0.001***
Final TA	20.3133		
BATHE anaesthesia group			
Initial AA	10.3360	3.88400	**0.001***
Final AA	6.4520		
Initial AS	12.9120	1.76000	**0.001***
Final AS	11.1520		
Initial TA	23.2480	5.64400	**0.001***
Final TA	17.6040		

APAIS: Amsterdam Preoperative Anxiety and Information Scale; AA: Anxiety due to anesthesia; AS: Anxiety due to surgery; TA: Total anxiety.
*p<0.001: statistically significant.

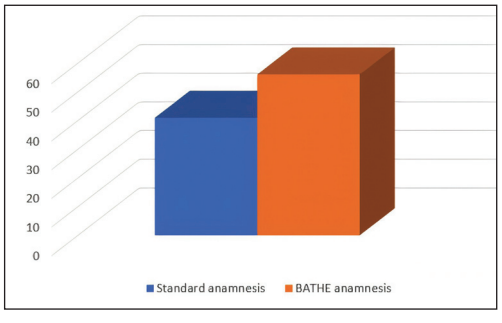

FIGURE 3: Satisfaction scores of patients according to interview technique.

scores.[18,19] In our study, the average APAIS-AA score was 9.95, the APAIS-AS score was 12.6, and the APAIS-TA score was 22.55, which was similar to other studies. Similarly, in our study, surgical anxiety scores of patients were higher than anesthesia anxiety scores. In short, the patients who learn that they will have surgery are more concerned about the surgical procedure. We believe that the patients' lack of knowledge about anesthesia and their misconceptions that anesthesia is not a risky procedure cause this condition. There are many studies in the literature about the causes of anxiety related to anesthesia. In a questionnaire study conducted by Demir et al., the 3 most worried cases of anesthesia were found to be not awakening postoperatively, feeling pain in the postoperative period and waking up during the operation.[20] In their study, Turhan et al. found 3 preoperative thoughts that caused the most anxiety to be not waking up after surgery, postoperative pain and staying in intensive care.[21] In our study, the 3 most feared causes of anesthesia were waking up after surgery, to wake up during surgery and staying in the intensive care unit as well, respectively.

In many studies, preoperative anxiety levels of women were found to be higher than men.[16,17,18,21,22] In our study, we also found that all APAIS scores of women were higher than men. This may be attributed to the fact that anxiety related to separation from the family is more intense and women can express their concerns more easily. Epidemiologically, depression and anxiety disorders are more common in women, and this may be affecting the results as well.

There are different results in the literature regarding the relationship between age and preoperative anxiety. Moerman et al. reached the conclusion that age did not affect anxiety, while Aykent et al. stated that the anxiety level is higher in people younger than thirty.[16,22] In addition, in their study, Taşdemir et al. concluded that anxiety levels were lower in elderly patients.[23] Also in our study, it

was concluded that anxiety levels decreased with increasing age. We think that the more fatalistic perspective prevails in our society as the age increases and the better the use of communication tools by young individuals allows them to become aware of the adverse events in the health field.

When the relationship between marital status and preoperative anxiety is examined, Demir and Taşdemir did not find a significant relationship between marital status and preoperative anxiety in 2 different studies.[20,23] In our study, APAIS anxiety scores were found to be high in married people with children. This situation has been associated with the sense of responsibility towards the family. Studies show that the degree of education has different effects on anxiety. While Taşdemir et al. could not find a relationship between education and anxiety, Caumo et al. reported that preoperative anxiety levels were higher in people who had an education longer than 12 years.[24] In our study, we also found that as the level of education increased, all APAIS averages of our patients increased. Since the unknown factor will be less effective in educated patients, anxiety can be expected to be lower, but we think that having detailed information on some subjects may increase anxiety.

Demir et al. found no significant relationship between income level and preoperative anxiety.[20] In our study, APAIS averages were found to be the highest in those who do not have an income, then in the areas above the minimum wage and the lowest in those who receive the minimum wage. Considering that surgery is an important cause of labour loss, it is interpreted that financial concerns are more prominent in those with low or high income.

There are studies showing that having previous anesthesia experience for the patients is an important variable on the level of preoperative anxiety. Moerman et al. reported that anesthesia experience in men decreased anxiety and did not change it in women.[16] Caumo et al. suggested that the experience of anesthesia did not change the level of anxiety.[24] However, in 2 different studies of Matthias et al. and Turzáková et al., the anxiety values of those who had no previous anesthesia experience were found to be higher.[17,18] In our study, APAIS anxiety scores were higher in patients who had previous anesthesia experience. This can be explained by the fact that the unknown element of surgery has an important place in the generation of anxiety.

Caumo et al. and Cuvaş et al. in 2 different studies found that anxiety was higher in tobacco users.[24,25] In our study, APAIS scores were higher in tobacco and alcohol users. This was attributed to the belief that tobacco and alcohol would adversely affect the operation compared to non-users. Moerman et al. stated that the type of operation did not change the level of anxiety in their study.[16] In the study of Caumo et al., minor surgery did not change the level of anxiety, while moderate and major surgery increased the level of anxiety.[24] In our study, the three branches with the highest APAIS anxiety scores were gynaecology, ENT and neurosurgery, respectively. We attributed the high level of anxiety in gynaecology cases to the fact that this section is composed of female patients and the concepts such as fertility and privacy are important in the related section. While the anxiety values of plastic surgery and urology branches were high in many studies, it was low in our study. This was thought to be due to socio-cultural and belief differences.

Preoperative anxiety is an unpleasant psychological condition for the patient. Giving information is the best way to alleviate patients' fears and relieve their worries. It has been shown in previous studies that the anesthesia doctor's interview and good communication in the preoperative period significantly reduced anxiety.[25,26] Cuvaş et al. showed that the anesthesiologist showing that they care greatly reduced anxiety without using drugs.[25]

In their study, Hepner et al. suggested that anesthesia doctors were the best source of information about surgery for patients. They found that if the patients were allowed to express themselves and the necessary medical explanations were made clearly, their anxiety decreased. In summary, they concluded that BATHE, which is a special interview technique, can be included in the standard preoperative examination.[13] DeMaria et al. found that the patients who underwent the BATHE

interview technique in the preoperative examination were more accepting and satisfied than the patients who were interviewed in the questionnaire, which included 100 patients who would be operated. In the patient satisfaction survey conducted after the examination, the satisfaction scores of BATHE group patients were found to be significantly higher than the other group.[14] In a study conducted by Ayvat et al. with 463 participants, there was a significant decrease in the State-Trait-Anxiety-Inventory (STAI) anxiety scores of the patients interviewed using the BATHE method compared to the pre-examination STAI anxiety scores. In addition, the satisfaction scores of the patients in the BATHE group were higher than the other group, although not statistically significant.[15] Our study has the same method with Ayvat et al.'s, study and we have also reach the same results showing that BATHE method decreases the preoperative anxiety.

There is another technique that has been tried on reducing preoperative anxiety: Benson's relaxation technique (BRT). In a recent research, made by Barabady et al., this technique has been tried on patients ongoing cataract surgery.[27] In BRT, it required the patients to sit in a comfortable position, close their eyes, relax all their muscles beginning from the soles of the feet, moving forward up, and relax all parts of their body, breath through their nose, pay attention to the sound of their breathing, and say the word "one" quietly to themselves when the breath was out; for example, breath in…out, "one"; in…out, "one"…, and continue for 20 min. Barabady et al. used this technique for each patient 3 times before surgery and they found that BRT reduces the preoperative anxiety and propofol consumption during anesthesia induction. The BATHE method, on the other hand, is superior to BRT because it takes less time, is a method used for the cause of anxiety, and can be applied at once in the outpatient clinic.

In our study as well, the average APAIS-AA, APAIS-AS and APAIS-TA decreased significantly in the patient group interviewed by BATHE compared to the pre-examination values. Although the average APAIS decreased in the standard interview group, the decrease in anxiety score was higher in the BATHE group. In addition, the patient satisfaction scores of the patients in the BATHE group were significantly higher than those in the standard anamnesis group. As a result, we believe that including anesthesia physicians during the preoperative examination to include BATHE method in the interview process will decrease the anxiety of patients and increase patient satisfaction.

CONCLUSION

In conclusion, preoperative anxiety is a common health problem that affects surgery, anesthesia and postoperative recovery negatively. Therefore, preoperative anxiety should be handled more carefully and more research should be done to reduce the anxiety of patients. We think that allowing patients to express themselves, providing explanatory information and empathizing with patients can be an effective way of reducing preoperative anxiety. We concluded that the inclusion of the BATHE interview technique, which includes all these elements, in preoperative examination may reduce preoperative anxiety.

Source of Finance

During this study, no financial or spiritual support was received neither from any pharmaceutical company that has a direct connection with the research subject, nor from a company that provides or produces medical instruments and materials which may negatively affect the evaluation process of this study.

Conflict of Interest

No conflicts of interest between the authors and / or family members of the scientific and medical committee members or members of the potential conflicts of interest, counseling, expertise, working conditions, share holding and similar situations in any firm.

Authorship Contributions

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