

Psychological Determinants of Preoperative Anxiety and Postoperative Adaptation among Cataract Surgery Patients: A Cross-Sectional Study

Yogita Chaudhary¹ and Jai Prabhat Ranjan²

¹M. Optometry student, Department of Optometry, School of Healthcare and allied sciences, GD Goenka University, Gurgaon, Haryana

²Assistant Professor, Department of Optometry, School of Healthcare and allied sciences, GD Goenka University, Gurgaon, Haryana

¹240100308018.yogita@gdgu.org and ²Jaiprabhat.ranjan@gdgu.org

Received: 28th Feb, 2026; Revised: 6th March 2026; Accepted: 7th April, 2026; Available Online: 20th April, 2026

ABSTRACT

Background: Cataract is still the major cause of vision impairment worldwide. Cataract surgery is frequent and safe operation, but patients typically experience acute psychological discomfort. Causes of preoperative worry include fear of pain, loss of vision, surgical complications, and uncertainty about the outcome. Such psychological aspects may affect patients' decision-making, overall surgical experience, and recovery. Their role in postoperative adaptation and pleasure has been little studied, especially in heterogeneous clinical populations.

Aim: To assess the psychological factors associated with preoperative anxiety and postoperative adaptation in patients undergoing cataract surgery, and to identify key determinants that can inform effective patient counseling and enhance surgical outcomes.

Objective: Primary objective: -To identify the psychological factors that influence patients' decisions to undergo cataract surgery, including the anxiety.

Secondary objective: -To evaluate the impact of psychological factors on patients expectations regarding postoperative outcomes, such as improvements in vision, quality of life.

Methods: A cross-sectional study was conducted on 148 patients of age 40 years and above receiving cataract surgery at a tertiary eye care institution in Delhi NCR. A random sample procedure was utilized to choose the participants. Data were collected via the structured pre-operative and post-operative questionnaires evaluating anxiety levels, psychological difficulties, intra-operative experiences, and post-operative adaptation. Statistical study. Multiple linear regression, non-parametric tests, and descriptive measures were employed to investigate the associations between psychological components and surgical outcomes.

Results: We studied 148 patients, with an average age of 53.4 ± 6.75 years. Most of the subjects (84.5%) experienced considerable preoperative worry. The most common concerns were pain and loss of eyesight (57.4%) and complications (25%). Despite the considerable perceived stress (mean 7.16 ± 0.80), none had a history of psychological illnesses. 95.3% of patients experienced greater comfort and reduced anxiety post-operatively. Visual satisfaction was excellent, with 84.4% of respondents reporting pleasure or great satisfaction and 77% of respondents returning to their normal activities completely. The mean adaptation score was 7.20 ± 0.83 , indicating good postoperative adjustment. Regression analysis showed that increased preoperative stress ($\beta = 0.378$, $p < 0.001$) and situational medical anxiety ($\beta = 0.392$, $p = 0.019$) were strongly linked to better postoperative adaptation. On the contrary, no significant associations were found between adaptation and demographic or clinical variables ($p > 0.05$).

Conclusion: It also finds that preoperative worry is common among cataract surgery patients but does not harm the postoperative outcomes. In fact, certain psychological factors may be favorable for post-surgical adjustment. The results indicate the importance of addressing patients' psychological problems with effective counseling and education for improved surgical success and emotional well-being.

Keywords: cataract surgery, preoperative anxiety, psychological factors, postoperative adjustment, patient satisfaction, visual results, counseling.

How to cite this article: Chaudhary Y, Ranjan JP. Psychological Determinants of Preoperative Anxiety and Postoperative Adaptation among Cataract Surgery Patients: A Cross-Sectional Study. Int J Drug Deliv Technol. 2026;16(65s):654-662. DOI: 10.25258/ijddt.16.65s.67

Source of support: Nil.

Conflict of interest: None

*Author for Correspondence: 240100308018.yogita@gdgu.org

1. INTRODUCTION

A cataract is one of the major causes of reversible visual impairment in the world and represents a serious public health problem, particularly in the elderly. It is characterized by progressive opacification of the natural crystalline lens, with consequent reduction in visual acuity, a decrease in contrast sensitivity, and a general reduction in visual quality. As the disease progresses, it begins to interfere with daily activities such as reading, driving, and work-related activities, reducing an individual's independence and quality of life.¹ Despite significant improvements in ophthalmic care, cataracts remain a leading cause of avoidable blindness, particularly in low- and middle-income countries where access to surgical services may be delayed or limited.² Cataract surgery is one of the most frequently performed and successful surgical treatments in modern medicine. Better surgical procedures, especially phacoemulsification with the addition of an intraocular lens (IOL), have resulted in far better visual results for patients and very few complications.³ These advances have made cataract surgery a very effective treatment, with quick recovery and high levels of patient satisfaction. While the clinical results are good, the psychological effects of cataract surgery have not been studied to the same extent. Even in routine surgical procedures, emotional reactions can be elicited, such as dread, uncertainty, and anxiety, which can influence perioperative experiences and postoperative recovery.⁴

It is common for people facing an operation to develop a psychological phenomenon known as "preoperative anxiety." It is often associated with fear, anxiety, and nervousness about the planned operation. Procedures performed on the eye are associated with higher levels of anxiety (particularly cataract surgery) because the eye is one of the most important organs of the body for independence and sensory awareness.⁵ The patients are usually concerned about losing vision, pain during the surgery, surgical complications, and uncertainty of the final outcome of the surgery. These concerns can have a serious impact on emotional well-being and can affect the patient's readiness to move forward with surgery.⁶ Preoperative anxiety has significant physiologic as well as emotional effects. High levels of anxiety have been associated with increased heart rate, increased blood pressure, and increased secretion of stress hormones that can impact intraoperative stability and patient cooperation.

These physiological responses can make surgery more difficult and lead to longer recovery times. Thus, controlling preoperative anxiety through appropriate interventions may improve the patient's outcome and

experience of the surgery.⁷ Cataract surgery is usually done while the patient is awake, using either topical or local anesthesia. Cooperation and relaxation of the patient give a good operating condition. Thus, management of preoperative anxiety is an important component of patient comfort and surgical success. Preoperative anxiety in patients undergoing cataract surgery is affected by a number of psychological factors. The main problem is loss of vision or poor surgical outcome. Vision plays an important role in supporting independence and quality of life.⁸ Also, the anxiety level may be increased due to the lack of knowledge or misconception of the surgical procedure. Patients who are not adequately informed of the surgery process and expected results might feel increased anxiety or expectation of poor results that can lead to more psychological distress. Patients have different levels of anxiety based on previous negative experiences with health care, culture, and ideas about surgery. Understanding these factors is crucial for healthcare providers, as addressing patients' concerns can significantly improve their overall experience. Providing comprehensive information and emotional support can help alleviate anxiety and foster a more positive outlook on the surgical journey.⁹ The psychological response of patients is also influenced by social and environmental factors. Family support, good communication with healthcare practitioners, and trust in the healthcare system can have a profound impact on patients' perception and coping with surgery. Patients who are properly counseled and reassured by health care personnel tend to report lower levels of anxiety than patients who feel poorly informed or unsupported. These supports provide a sense of safety, security, and empowerment and enable patients to engage more actively in their recovery process. Ultimately, a comprehensive approach that addresses both emotional and physical needs can translate into better surgical results and overall patient satisfaction.¹⁰ Now, it is more recognized that the results of surgery are influenced not only by clinical factors, but also by the psychological status of patients. Cataract surgery is a very successful, minimally invasive procedure, but it can be a significant psychological stressor for many people. The operation has been shown to be simple, but many people experience varying degrees of anxiety before having cataract surgery. This suggests that the patients' emotional reactions are mainly influenced by the expectation of the surgery per se rather than the complexity of the process.

It is important for health care providers to understand and address these emotional responses. Preoperative Counseling and Support: Patients' fears can be alleviated and their overall experience improved by preoperative counseling and support. This ultimately leads to better

surgical outcomes.¹¹ Among other things, preoperative anxiety causes fear of the surgical experience itself. Common concerns are awareness during the procedure, fear of instruments near the eye and lack of control of movement during surgery. Moreover, the type of cataract surgery also adds to the psychological stress as the patients are awake for the surgery under local or topical anesthesia. Visual impressions such as bright lights, shadows or movements can be disturbing during surgery for patients, especially if they have not been sufficiently prepared for the intervention beforehand.¹²

2. METHODOLOGY

The psychological aspects impacting preoperative anxiety and postoperative adaptability in patients undergoing cataract surgery were investigated in the present study. **Study Design** This was a cross-sectional, observational study. This method permitted the evaluation of psychological factors without any experimental intervention throughout the preoperative and postoperative periods of cataract surgery. **Study Setting** The study was performed at Eye Mantra Hospital, a tertiary-level eye care institution located in Delhi NCR, renowned for its specialist ophthalmology services and its high number of cataract surgeries. **Duration of study** The study was carried out over a period of six months during which patient enrollment, questionnaire administration, and data analysis were done. All patients attending the hospital throughout this period were eligible for inclusion. **Sample Size:** A total of 148 patients diagnosed with cataracts and indicated for surgical care were included in the study. All participants were assessed pre- and post-operatively, and the data set was full with no missing values. **Sampling Method:** A random sampling approach was used to pick patients scheduled for cataract surgery from the list. This strategy was used to minimize selection bias and to have proper representation of the target population. **Inclusion Criteria:** Patients diagnosed with cataracts and planned for cataract surgery Patients of age 40 years and above Patients who have agreed to participate in the study Patients who have given written informed consent **Exclusion Criteria** Patients with psychiatric illnesses Patients with significant cognitive impairment that affects their ability to understand the questionnaire Patients who are unable to communicate effectively Patients who are not willing to participate or refuse to give informed consent **Data Collection Tool** Data were collected using a structured and pre-designed questionnaire, administered in two phases. A pre-operative questionnaire was used to assess the anxiety levels, perceived stress, and psychological anxieties and concerns associated with cataract surgery. Patient comfort, anxiety reduction, satisfaction with visual results, functional recovery, and postoperative adaptation were evaluated using a postoperative questionnaire on a 10-point scale. The questionnaire was prepared in simple language to improve

the clarity and reliability of the responses. Statistical Analysis Data collected were entered in Microsoft Excel and statistically analyzed using appropriate statistical tools. Demographic and psychological characteristics were summarized using descriptive statistics (frequencies, percentages, mean, and standard deviation). Characteristics associated with postoperative adaptation were identified by multiple linear regression analysis. This analysis will help identify the factors that influence the recovery and adaptation after the surgery. Understanding these characteristics can help healthcare providers design better interventions to help patients during their recovery post-surgery. Since several variables were not normally distributed, the Kruskal–Wallis non-parametric test was performed to compare adaptation scores across clinical and psychological categories. A P value of < 0.05 was considered statistically significant. **Ethical Approval:** The study was approved in advance by the Institutional Ethics Committee. All participants gave written informed consent, and patient information was kept strictly confidential and anonymous throughout the research process in compliance with ethical norms.

3. RESULTS

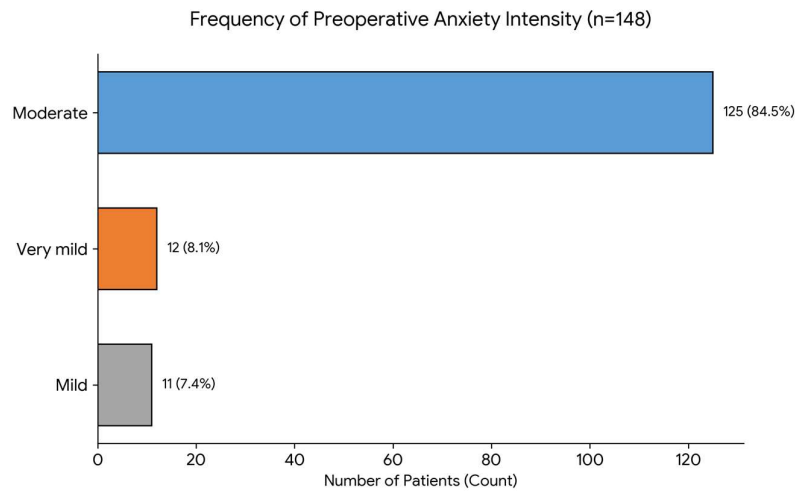
The mean age of participants was 53.84 ± 6.75 years (range 43–68 years), indicating a predominance of middle-aged to elderly people, which is usual for cataract surgery. Most of the participants were married (95.9%). The majority were graduates (66.2%), indicating that the sample was relatively educated. Occupationally, most of the participants were engaged in office work (37.2%). Most of them lived in the West (41.9%) and East (39.2%) regions. More than half (56.1%) of the patients had no systemic disease, with diabetes (23.6%) and hypertension (12.2%) being the most common.

Table: 1: Demographic data

Variables	Percentage
Married	95.9%
Graduates	66.2%
Office work	37.2%
No systemic illness	56.1%
Diabetes	23.6%
Hypertension	12.2%

Complete data were available for all 148 participants. The mean anxiety score was 2.76 ± 0.59 , and the majority of individuals (84.5%) had moderate anxiety before surgery. The major concern was discomfort and fear of loss of vision (57.4%), followed by postoperative complications (25%). All participants (100%) reported having family or social support and talked to someone about their health problems. 79.7% were not generally medically anxious, while 20.3% were situationally anxious. They all had no prior history of psychological illnesses, which suggests that the worry was largely situational. The mean preoperative stress score was 7.16 ± 0.80 , showing high levels of tension even when there was strong support. Results showed that preoperative anxiety was moderate to high in general, mostly because of concerns of pain, visual

loss, and complications. Graph 1. Frequency of intensity of preoperative anxiety.



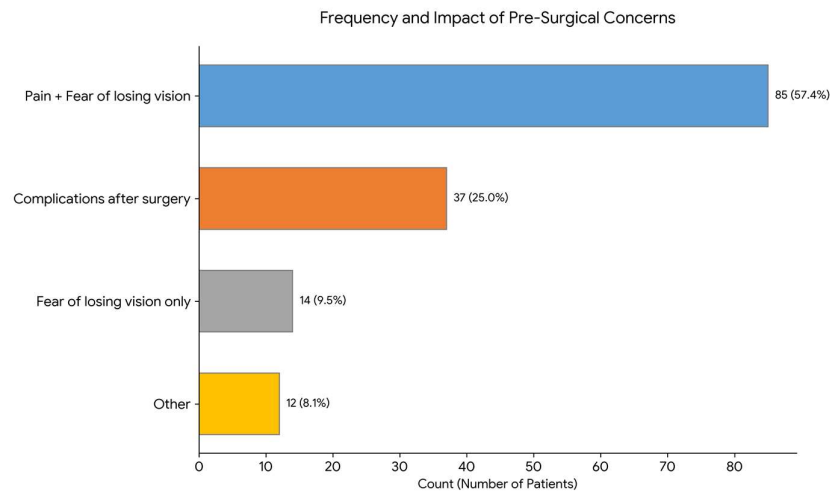
Graph :1 frequency of preoperative anxiety intensity

Table 2: Frequency

Anxiety Intensity	Counts	% of total	Cumulative%
Very mild	12	8.1%	8.1%
Mild	11	7.4%	15.5%
Moderate	125	84.5%	100.0%

The preoperative anxiety analysis indicated that most of the individuals had a moderate level of anxiety before cataract surgery. Most of the respondents (84.5%) were in the moderate category, and just 8.1% and 7.4% were in the

very mild and mild anxiety categories, respectively. These data underscore the commonality of psychological discomfort in patients in the pre-surgical phase.



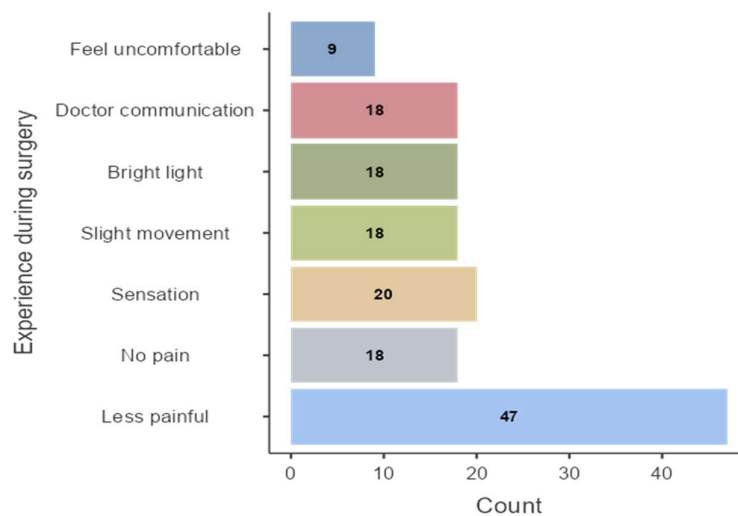
Graph 2: Frequency and impact of Pre-Surgical Concerns

Table 3: Frequency of main concern before surgery

Main Concern	Counts	% of Total	Cumulative %
Pain + Fear of losing vision	85	57.4%	57.4%
Complications after surgery	37	25.0%	82.4%
Fear of losing vision only	14	9.5%	91.9%
Other	12	8.1%	100.0%

Fear of pain and possible loss of vision was the most important concern of participants before surgery, which was indicated by 57.4% of persons. The second most common concerns were postoperative problems at 25.0%.

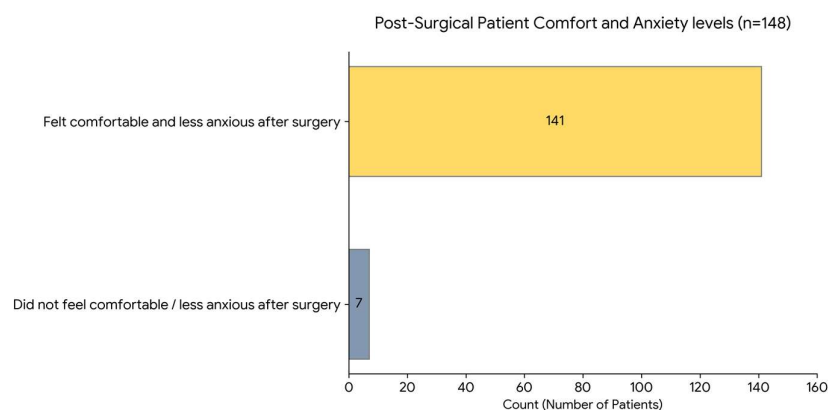
Furthermore, 9.5% of the subjects mentioned worry of eyesight loss only, and 8.1% expressed other types of concerns.



Graph 3: Experience during surgery

Assessment of intra-operative experiences during cataract surgery showed that most patients reported less discomfort during the procedure. 47 participants reported that the

treatment was less uncomfortable, indicating a high level of tolerance.



Graph 4: Post surgical patient comfort and anxiety levels (n-148)

Postoperative experiences were evaluated and showed that the majority of the patients had a good psychological outcome after cataract surgery. In total, 141 individuals reported an increase in comfort and a decrease in anxiety after the treatment, which indicates a clear improvement in postoperative adaptation and emotional status. In contrast, only a small number of patients reported no change in their levels of comfort or anxiety after surgery.

Graph 5: Correlation Matrix Heatmap

Blue color → Negative correlation ($r < 0$) (one variable grows, the other declines)

Darker blue = stronger negative relationship
 Red color → Positive correlation ($r > 0$) (when one variable increases, so does the other)
 Redder = more positive association.
 White / Light color → No or extremely weak association ($r \approx 0$) (Variables are not connected).

The correlation matrix heatmap shows the correlations between demographic, psychological, intraoperative, and postoperative factors according to Pearson's correlation

coefficient R. The color scale runs from blue for negative correlation to red for positive correlation. Values close to ± 1 indicate strong relationships. Values near 0 indicate weak or no relationships. In general the heatmap shows a weak to moderate correlation of most of the variables, as there are more light colors. This implies the variables are working in a fairly autonomous manner. There does not seem to be one factor that is strongly controlling the others. There was no correlation between demographic variables (age, education, occupation, and presence of systemic illness) and the psychological characteristics and the surgical outcomes. This implies that these background characteristics have little influence on pre-operative anxiety or post-operative recovery and lends support to the notion that demographic factors are only minor determinants of patient responses. Preoperative Stress and Anxiety There are positive correlations between preoperative anxiety, perceived stress, and fear-related concerns. Fear of surgery, complications, and loss of vision tend to cluster together, suggesting that patients who have one form of worry are more likely to report other forms of anxiety. This is a good example of the psychological phenomenon of related anxieties. In

addition, these concerns were positively correlated with perceived stress levels, i.e., the higher the stress level, the greater the concern about surgical outcomes. Intraoperative Experience Factors The intraoperative experience variables (i.e., pain, consciousness, and sensory responses) were weakly to moderately intercorrelated. This would suggest that the more uncomfortable patients may be more sensitive to intraoperative stimuli such as light or sound. But the small size of these associations reflects variation in individual experience during surgery. Postoperative outcome: Postoperative factors are positively associated with comfort, visual satisfaction, and return to daily activities. This means better surgical outcomes are related to better functional recovery and less anxiety. Higher satisfaction with a consistent pattern of positive recovery is associated with the level of successful adaptation post-surgery. Fear and Concern Variables Moderate correlations on a cluster of fear variables (worry about complications, worry about surgical failure, pain, death). In other words, fear is a multi-dimensional and interconnected thing, not a one-dimensional thing. The more they fret about one thing, the more they fret about others.

Table 4: Linear Regression (Model fear measures)

Model	R	R ²
1	0.179	0.0320

Table 5: Model coefficients -satisfaction with vision

Predictor	Estimate	SE	t	p
Intercept	2.1427	0.2381	8.99986	<.001
Anxiety/feeling intensity about upcoming cataract surgery	-0.0311	0.0808	-0.38536	0.701
Main concern before surgery	-0.0531	0.0459	-1.15783	0.249
Anxiety in medical situations	0.2376	0.1192	1.99247	0.048
Had cataract surgery before	-6.31e-4	0.1014	-0.00623	0.995

Linear regression analysis of factors determining adaptation after cataract surgery. Multiple linear regression analysis was performed to assess the parameters affecting postoperative adaptation following cataract surgery. Postoperative adjustment was scored on a 10-point scale. The model included demographic characteristics, psychological parameters, and perioperative events. A total of 148 subjects were included in the analysis. Model Performance and Variance Explained The regression model explained a considerable amount of variance with a multiple correlation coefficient R of 0.179. The coefficient of determination (R²) was 0.0320, indicating that about 27.2% of the variability in postoperative adaptation ratings was explained by the factors included in the model. The model is therefore including multiple significant variables, although other unmeasured factors may possibly influence postoperative adaptation. Significant Predictors of Preoperative Stress Preoperative stress was found to be a significant predictor of postoperative adaptation. Higher levels of preoperative stress were related to higher adaptation scores after surgery ($\beta = 0.378$, $t = 4.62$, $p < 0.001$). The results show that patients with higher anticipatory stress may be more

mentally involved in recovery, which may increase their awareness and adjustment to postoperative alterations. Anxiety in Medical Contexts: Participants with anxiety in medical settings scored considerably higher on postoperative adaptation than those without such anxiety ($\beta = 0.392$, $p = 0.019$). This may suggest that persons with pre-existing anxiety are more conscious of their healing process, resulting in greater perceived adaptability. Intraoperative Experience (Pain Perception): Those who reported “no pain” during surgery had significantly lower adaptation ratings as compared to those who described the process as “less painful” ($\beta = -0.473$, $p = 0.025$). This shows that a fully painless experience may make the patient think the treatment was less important and hence lead to reduced psychological involvement throughout recovery. Other intraoperative characteristics such as awareness of light, ocular sensations, minor movement, communication with the surgeon, and general discomfort were not substantially associated with postoperative adaptation. Non-significant predictors: Age did not predict postoperative adaptation significantly ($\beta = -0.005$, $p = 0.599$), showing that levels of adaptation were essentially similar across age groups in the research population.

Primary preoperative concern: Different categories of preoperative concern (fear of vision loss alone, concerns about surgical complications, and other concerns) did not significantly influence postoperative adaptation when compared to the reference category (combined fear of pain and vision loss). Concern about complications was near the threshold of significance ($\beta = -0.298$, $p = 0.058$) but did not achieve significance. Satisfaction with Vision after Surgery: Adaptation scores were not significantly associated with levels of satisfaction with visual outcomes. This study opens up the possibility that the process of post-operative adaptation is not exclusively based on visual improvement but also incorporates psychological and experiential components. Clinical Significance and Importance This regression analysis shows the importance of psychological factors in post-operative adjustment after cataract surgery. Preoperative stress and anxiety might

boost adaptability, particularly in medical settings, possibly by heightening patients' awareness and cognitive involvement during recovery. The fact that patients who experienced little pain during surgery had the lowest adaptability points to the complexity of patient perception and the psychological processing of surgical experiences. This suggests that a degree of awareness or emotional involvement during the operation may be useful for postoperative adjustment. To conclude, our results highlight the necessity of psychological screening and counseling as part of preoperative care. Preoperative education of the patient and management of fear and expectations of the patient can help in better postoperative adaptation. Data also suggest that successful adaptation goes beyond clinical measures of visual improvement and is largely driven by emotional and cognitive issues.

Table 6: One-way ANOVA(Non-Parametric)

Kruskal-Wallis's			
	X ²	df	p
Anxiety/Feeling Intensity about upcoming cataract surgery	1.2216	1	0.269
Main Concern before Surgery	0.3453	1	0.557
On scale 1-10 how stressful you feel before surgery	0.3410	1	0.559
After surgery, feel more comfortable and less anxious	0.1489	1	0.700
Had cataract surgery before	0.0317	1	0.859
On scale of 1-10, how well you feel u are adapting after cataract surgery	0.4167	1	0.519

Postoperative Adaptation Comparison across Clinical and Psychosocial Groups (Kruskal-Wallis Non-Parametric Analysis) Since the postoperative adaptation scores (on a 10-point scale) were not normally distributed, Kruskal-Wallis's test was used to examine differences in adaptation across selected categorical clinical and psychosocial variables. Previous Eye Surgery History: Postoperative adaptation was not statistically different between those who had had previous eye surgery and those who had not ($\chi^2 = 0.116$, $df = 1$, $p = 0.734$). The effect size was very small ($\epsilon^2 = .0008$), suggesting that previous surgical experience had a negligible effect on the adaptation outcomes. No significant differences in adaptation scores according to occupational group were observed ($\chi^2 = 0.822$, $df = 1$, $p = 0.365$). In this group, the effect size was very small ($\epsilon^2 = 0.0056$), suggesting that the employment position did not have a significant effect on postoperative adaptation. Postoperative Comfort and Anxiety Management: No significant difference was found in the adaptation scores of those participants feeling more comfortable and less apprehensive and those who did not ($\chi^2 = 0.149$, $df = 1$, $p = 0.700$). The effect size was small ($\epsilon^2 = 0.0010$), suggesting that this variable was not an important factor in explaining the differences in adaptation. Scores: These findings suggest that other factors than comfort and anxiety might be of more importance in the adjustment process of patients after surgery and that further study is needed to find out what

these might be. Preoperative Anxiety Degree. Categorical analysis did not demonstrate any statistically significant association between preoperative anxiety level and postoperative adaptation ($\chi^2 = 1.222$, $df = 1$, $p = 0.269$). However, the impact size remained tiny ($\epsilon^2 = 0.0083$), suggesting that differences across anxiety intensity groups did not contribute to meaningful variation in adaptation scores. The main problem before the surgery. There were no significant differences in adaptability among categories of patients' principal pre-operative concerns ($\chi^2 = 0.345$, $df = 1$, $p = 0.557$). The effect size was relatively low ($\epsilon^2 = 0.0024$), suggesting that the type of concern before surgery had little influence on postoperative adjustment.

4. DISCUSSION

Preoperative anxiety in cataract surgery The results of the current study reveal that preoperative anxiety is very frequent among patients who are undergoing cataract surgery, with a large number of patients experiencing moderate levels of anxiety prior to the procedure. This means that cataract surgery is a common and very successful eye operation, but it is still a psychologically stressful event for many people. Preoperative emotional distress is affected by important factors such as fear of possible loss of vision, failure of surgery, and surgery itself. Similar results have been reported in previous studies. Anxiety was the most common psychological response in patients awaiting cataract surgery.¹¹ Influence

of patient worries and expectations. Fear of pain, loss of vision, and post-operative problems were major concerns in the present study, which affected the emotional state of the patients before surgery. Such worries have a major effect on patients' expectations for surgical results. Previous studies have found that while patients expect improvements in vision and quality of life following cataract surgery, they are nevertheless concerned about the hazards of operation. For those who know little about the operation, the combination of high hopes and fear might increase anxiety.¹³

Outcomes and satisfaction after surgery Post-operative results reported in this study were mostly positive, even though a substantial amount of pre-operative anxiety was present. Most patients noticed improvement in comfort, visual function, and capacity to do everyday activities after surgery. These data indicate that cataract surgery is not only associated with restoration of vision but also with a reduction in psychological suffering after successful completion of the treatment. Previous studies have indicated similar results, where high levels of patient satisfaction have been found after cataract surgery, particularly when the visual outcome in the postoperative period was as anticipated by the patients.¹⁴ Psychological adaptation after cataract surgery The present study revealed good postoperative adaptation in patients. This shows that people are generally able to adapt well after cataract surgery. Psychological adaptation seems to be more related to patients' perception and emotional response rather than demographic or clinical variables alone. Previous studies have indicated that gains in visual function are generally associated with enhanced confidence, increased independence, and greater emotional well-being, all of which contribute to better postoperative adjustment.¹⁵

Counselling and information provision The outcomes of the present study underscore the relevance of psychological counseling and appropriate pre-operative information in cataract surgery. Evidence suggests that patients who receive detailed explanations of the surgical technique, what to expect, and the recovery process have lower levels of anxiety and better satisfaction following surgery. Addressing patients' worries and providing comfort before surgery may minimize fear, enhance cooperation during the surgery, and improve post-operative adjustment in general.¹⁶

5. CONCLUSION

The current study shows that psychological factors, besides clinical and surgical factors, are associated with patient outcomes and provides useful information on psychological issues in cataract surgery. The study revealed that a significant number of patients presenting

for cataract surgery experience preoperative anxiety. Most participants had moderate anxiety about fear of pain during surgery, vision loss, and surgical complications. These problems highlight the importance of recognizing anxiety as a common and important component of the preoperative process of eye care. In the present study, the prevalence of preoperative anxiety was high among 148 cataract patients with a mean age of 53.4 ± 6.75 years. Most patients had moderate anxiety before the operation. The most commonly expressed fears were fear of pain, loss of vision, and surgical complications. The postoperative results were good, in general, but the anxiety level was so high. Many patients reported less anxiety following the procedure. More than 80% were satisfied with their visual outcome, and most were able to return to their normal routine. A high mean postoperative adaptation score is suggestive of good overall functional and psychological adjustment. Regression analysis revealed that situational medical worry and preoperative stress were significant predictors of better postoperative adaptation ($\beta = 0.392$, $p = 0.019$; and $\beta = 0.378$, $p < 0.001$, respectively). The findings suggest that greater preoperative psychological engagement may be associated with improved postoperative adjustment. This is a reminder of the importance of dealing with psychological issues prior to surgery, as they can play a big role in the success of recovery. Therefore, interventions to lower anxiety levels and enhance coping strategies pre-operatively may further improve the adaptation and the overall satisfaction of the patients. In contrast, no statistically significant association was discovered between postoperative adaptation and clinical or demographic characteristics ($p > 0.05$), so the variables age, occupation, and previous surgery history did not influence the outcomes significantly. Overall, the study results suggest that preoperative worry is frequent in patients undergoing cataract surgery but does not negatively impact recovery from the procedure. In fact, minor anxiety may actually help post-operative adjustment. The findings highlight the need for the incorporation of psychological evaluations and focused counseling into routine cataract care. Addressing patient concerns, increasing awareness, and providing emotional support can significantly enhance patient happiness, surgical experiences, and overall results.

6. REFERENCES

1. Chen, S. P., Woreta, F., & Chang, D. F. (2025). Cataracts: A review. *JAMA*, 333(23), 2093–2103.
2. Flaxman, S. R., Bourne, R. R. A., Resnikoff, S., Ackland, P., Braithwaite, T., Cicinelli, M. V., Das, A., Jonas, J. B., Keeffe, J., Kempen, J. H., Leasher, J., Limburg, H., Naidoo, K., Pesudovs, K., Silvester, A., Stevens, G. A., Tahhan, N., Wong, T. Y., & Taylor, H. R. (2017). Global causes of blindness and distance vision impairment 1990–2020.
3. Kelman, C. D. (1967). Phaco-emulsification and aspiration: A new technique of cataract removal: A

- preliminary report. *American Journal of Ophthalmology*, 64(1), 23–35.
4. Marback, R. F., Temporini, E. R., & Kara-José, N. (2007). Emotional factors prior to cataract surgery. *Clinics*, 62(4), 433–438.
 5. Nijkamp, M. D., Kenens, C. A., Dijker, A. J. M., Ruiter, R. A. C., Hiddema, F., & Nuijts, R. M. M. A. (2004). Determinants of surgery related anxiety in cataract patients. *British Journal of Ophthalmology*, 88(10), 1310–1314.
 6. Gray, C. S., Karimova, G., Hildreth, A. J., Crabtree, L., Allen, D., & O'Connell, J. E. (2006). Recovery of visual and functional disability following cataract surgery in older people: Sunderland Cataract Study. *Age and Ageing*, 35(5), 452–457.
 7. Williams, J. B., Alexander, K. P., Morin, J. F., Langlois, Y., Noiseux, N., Perrault, L. P., Smolderen, K. G., Arnold, S. V., Eisenberg, M. J., & Pilote, L. (2013). Preoperative anxiety as a predictor of mortality and major morbidity in patients aged >70 years undergoing cardiac surgery. *The American Journal of Cardiology*, 111(1), 137–142.
 8. Pager, C. K. (2005). Randomized controlled trial of preoperative information to improve satisfaction with cataract surgery. *Ophthalmology*, 112(8), 1371–1376.
 9. Wasfi, E. I. (2008). Patient satisfaction with cataract surgery. *Middle East African Journal of Ophthalmology*, 15(1), 14–18.
 10. Olawoye, O. O., Ashaye, A. O., Bekibele, C. O., Ajuwon, A. J., & Esimai, O. A. (2012). A comparative evaluation of patients' satisfaction with cataract surgical services in a public tertiary and a private secondary eye care facility in Nigeria. *Nigerian Journal of Clinical Practice*, 15(1), 87–91.
 11. Ramirez, D. A., et al. (2017). Anxiety in patients undergoing cataract surgery. *Clinical Ophthalmology*.
 12. Obuchowska, I., Mariak, Z., & Dadan, J. (2021). Fear and anxiety associated with cataract surgery under local anesthesia in adults: A systematic review. *Psychology Research and Behavior Management*, 14, 781–793.
 13. Colin, J., et al. (2010). Assessment of patient satisfaction with outcomes of and ophthalmic care for cataract surgery. *Journal of Cataract & Refractive Surgery*.
 14. Wasfi, E. I. (2008). Patient satisfaction with cataract surgery. *Middle East African Journal of Ophthalmology*, 15(1), 14–18.
 15. Gray, C. S., Karimova, G., Hildreth, A. J., Crabtree, L., Allen, D., & O'Connell, J. E. (2006). Recovery of visual and functional disability following cataract surgery in older people: Sunderland Cataract Study. *Age and Ageing*, 35(5), 452–457.
 16. Mollazadegan, K., Lundström, M., & Fagerström, C. (2014). Correlation between patient-reported outcomes and clinical outcomes after cataract surgery in patients aged 65 years or older. *Acta Ophthalmologica*, 92(4), 374–379.