INTERNATIONAL JOURNAL OF ADVANCED RESEARCH
International Peer-Reviewed Research Journal
ISSN (Online): 3106-7980 | ISSN (Print): 3106-7972
Volume 3 • Issue 2 • June 2026

BEYOND VISION RESTORATION: IMPACT OF CATARACT SURGERY ON PSYCHOLOGICAL WELL-BEING, QUALITY OF LIFE, AND EMOTIONAL HEALTH AMONG OLDER ADULTS

Misbah Naeem[1], Hajra Dildar[2], Anbar Zulfiqar*[3], Sumreen Bano[4]

[1]*Ex.Pgr at KRL hospital Islamabad*
[2]*Lecturer Psychology (BPS-17), Govt. Associate College for Women Dhok Kala Khan, Rawalpindi*
[*3]*Lecturer, Department of Optometry, Faculty of Allied Health Sciences, Iqra University, Chak Shahzad Campus, Islamabad, Pakistan*
[4]*Lecturer Optometry, Khyber Medical University Peshawar*

[1]misbahhamaad78@gmail.com, [2]dildarhajra@gmail.com, [*3]anberzulfiqar@gmail.com, [4]sumreen998@gmail.com

DOI: https://doi.org/10.5281/zenodo.24218413

Keywords
Cataract surgery; Quality of life; Geriatric depression; Anxiety; Psychosocial outcomes; Older adults.

Article History
Received: 13 April 2026
Accepted: 30 May 2026
Published: 15 June 2026

Copyright @Author
Corresponding Author: *
Anbar Zulfiqar

Abstract

Background: *Cataract surgery is traditionally evaluated through clinical visual outcomes, yet its broader psychosocial impact remains under-researched in Pakistan. This study evaluated the impact of cataract surgery on quality of life (QoL), depression, and anxiety among older adults in Islamabad, shifting the evaluative lens toward holistic patient-reported outcomes.*

Methods: *A prospective longitudinal study was conducted among 325 older adults (mean age = 68.4 ± 6.2 years) undergoing uncomplicated phacoemulsification at tertiary care hospitals in Islamabad. Participants were assessed pre-operatively and at a 3-month post-operative follow-up using the WHOQOL-OLD, GDS-15, and GAD-7 scales. Prior to parametric testing, data normalization (skewness/kurtosis within ±2.0) and internal consistency (Cronbach's $\alpha > 0.70$) were verified. Paired t-tests, Chi-square analyses, and multiple linear regression were utilized for inferential statistics.*

Results: *All instruments demonstrated excellent reliability (Cronbach's α = 0.82–0.88). Post-operative assessments revealed significant improvements across all psychosocial metrics. Mean WHOQOL-OLD scores increased significantly from 54.2 to 72.6 ($p < .001$). Depressive symptoms (GDS-15) decreased from the mild-to-moderate range (8.6) to normal levels (3.9) ($p < .001$), and anxiety (GAD-7) dropped from 9.4 to 4.2 ($p < .001$). Age-stratified analysis indicated the highest frequency of emotional improvement in the 60–69 age group (83.8%) compared to those aged ≥80 years (63.1%). Regression analysis identified younger age and joint-family living arrangements as significant positive predictors of QoL improvement.*

Conclusion: *Cataract surgery yields profound psychosocial benefits beyond visual restoration, significantly enhancing QoL and remitting depression and anxiety in older adults. Integrating routine psychosocial screening into ophthalmic care pathways and prioritizing earlier surgical intervention–*

particularly for the oldest-old and those lacking robust family support—are recommended to maximize holistic health outcomes.

Introduction

Cataracts represent one of the most prevalent age-related ocular conditions globally, serving as a leading cause of vision impairment and blindness among older adults (World Health Organization [WHO], 2023). As global life expectancy continues to rise, the demographic shift toward an aging population has exponentially increased the incidence of cataracts, placing a substantial burden on healthcare systems and individual quality of life (QoL). Historically, the primary and often sole metric for evaluating the success of cataract surgery, phacoemulsification with intraocular lens (IOL) implantation, has been the restoration of visual acuity. While achieving optimal refractive outcomes is undeniably critical, this purely clinical perspective fails to capture the holistic impact of the procedure on the patient's daily life and mental health (Desai et al., 2020).

Vision is intricately linked to an individual's ability to perform activities of daily living (ADLs), maintain social connections, and navigate their environment safely. Consequently, vision impairment in older adults is strongly correlated with a decline in functional independence, an increased risk of falls, and a heightened prevalence of psychological distress, including depression and anxiety (Chen et al., 2022). Cataract surgery, therefore, should not be viewed merely as an optical intervention, but as a comprehensive psychosocial and functional rehabilitation strategy. Recent paradigm shifts in ophthalmic care emphasize patient-reported outcome measures (PROMs), recognizing that the ultimate goal of surgery extends beyond the Snellen chart to encompass the restoration of overall well-being (Patel & Lee, 2021).

Despite the growing recognition of holistic outcomes, there remains a need to systematically synthesize how cataract surgery influences psychological well-being, emotional health, and broader QoL across diverse demographic cohorts. Understanding these multidimensional impacts is crucial for optimizing preoperative counseling, tailoring postoperative care, and informing healthcare policies that prioritize value-based, patient-centered geriatric medicine. This paper explores the impact of cataract surgery on the psychological well-being, QoL, and emotional health of older adults, moving beyond traditional visual metrics to evaluate the profound, systemic benefits of sight restoration.

Literature Review

Shifting Paradigms in Cataract Surgery Outcomes

The evaluation of cataract surgery outcomes has undergone a significant evolution over the past two decades. Traditionally, surgical success was defined by postoperative visual acuity and the absence of intraoperative or postoperative complications (Brown et al., 2020). However, researchers have increasingly demonstrated that visual acuity correlates only modestly with a patient's self-reported visual function and overall life satisfaction (Mangione et al., 2019). To bridge this gap, ophthalmology has adopted validated PROMs, such as the National Eye Institute Visual Function Questionnaire (NEI-VFQ-25) and the CatQuest-9SF, which assess the functional and emotional impacts of vision loss and its subsequent restoration (Lee et al., 2021). This shift underscores a growing consensus that the true value of cataract surgery lies in its ability to restore functional independence and enhance the patient's subjective experience of life.

Enhancing Quality of Life and Functional Independence

The restoration of vision through cataract surgery has been consistently linked to significant improvements in health-related quality of life (HRQoL). Improved visual acuity directly translates to enhanced performance in ADLs, such as reading, cooking, managing medications, and mobility (Tseng et al., 2021). Furthermore, cataract surgery plays a critical role in fall prevention. Visual impairment is a major

modifiable risk factor for falls in the elderly, which can lead to catastrophic injuries, loss of independence, and increased mortality. Studies indicate that older adults who undergo cataract surgery experience a marked reduction in fall rates and hip fractures compared to those with unoperated cataracts, thereby preserving their physical autonomy and reducing the economic burden on healthcare systems (Day et al., 2022).

Psychological Well-Being and Emotional Health

The psychological ramifications of vision loss are profound, with sensory deprivation frequently leading to social isolation, cognitive decline, and mood disorders. Cataract surgery has emerged as a potent intervention for mitigating these psychological burdens. Research demonstrates that restoring vision significantly reduces the prevalence and severity of depressive symptoms in older adults (Smith & Jones, 2023). The alleviation of visual strain and the subsequent return to social and recreational activities foster a renewed sense of purpose and emotional stability. Moreover, the emotional health benefits extend to the reduction of anxiety related to environmental navigation and personal safety. Wang et al. (2024) found that postoperative patients reported significantly lower levels of anxiety and a higher sense of security in their daily environments. Interestingly, recent longitudinal studies also suggest a protective effect of cataract surgery against cognitive decline; by restoring sensory input and facilitating social engagement, the surgery may help delay the onset of dementia and cognitive impairment in vulnerable older populations (Chen et al., 2022).

Demographic Variations and Age-Group Stratification

While the overall benefits of cataract surgery on QoL and psychological health are well-documented, the magnitude of these benefits is not uniform across all patient demographics. Analyzing medical data through age-group stratification reveals nuanced outcomes. For instance, frequency and percentage analyses of postoperative improvements often show that "young-old" adults (aged 65–74) experience the most rapid and pronounced gains in functional independence and social participation (Patel & Lee, 2021). In contrast, the "old-old" cohort (aged 85 and above) may show more modest improvements in ADLs due to the presence of compounding comorbidities, yet they still exhibit significant improvements in emotional health and reductions in depressive symptoms (Wang et al., 2024). Gender distribution also plays a role in psychosocial outcomes. Female patients, who generally have a higher baseline prevalence of anxiety and depression related to vision loss, tend to demonstrate a higher frequency of significant psychological improvement post-surgery compared to their male counterparts (Desai et al., 2020). Furthermore, patients with lower baseline educational and socioeconomic status often report a more dramatic subjective improvement in QoL, as the restoration of vision allows them to resume essential daily tasks without relying on costly external assistance (Brown et al., 2020). These demographic variations highlight the necessity for stratified data reporting to ensure that postoperative care and expectations are appropriately tailored to specific patient subgroups. Despite the robust evidence supporting the psychosocial benefits of cataract surgery, gaps remain in the current literature. Many studies rely on cross-sectional designs or short-term follow-ups (e.g., 3 to 6 months), which may fail to capture the long-term trajectory of psychological adaptation and the potential onset of posterior capsule opacification (PCO) that can diminish QoL over time (Tseng et al., 2021). Additionally, there is a lack of standardized protocols for integrating mental health screenings into routine preoperative and postoperative ophthalmic care. Future research must prioritize longitudinal, multi-center studies that utilize advanced statistical modeling to isolate the specific causal effects of cataract surgery on emotional health, controlling for the myriad of confounding variables present in aging populations.

Methodology

Study Design and Setting

A prospective, observational longitudinal study was conducted over a six-month period (pre-operative baseline and 3-months post-operative follow-up). The study was conducted across two major tertiary care ophthalmology departments in Islamabad: the Pakistan Institute of Medical Sciences (PIMS) and Shifa International Hospital. These sites were selected to capture a diverse socioeconomic demographic of the capital's older population.

Participants and Sampling

The study population comprised older adults (aged ≥60 years) scheduled for unilateral or bilateral uncomplicated cataract surgery.

- **Inclusion Criteria:** Age ≥60 years, diagnosed with age-related cataract, scheduled for phacoemulsification, and capable of providing informed consent and completing questionnaires (with assistance if needed due to literacy).
- **Exclusion Criteria:** Pre-existing severe ocular comorbidities (e.g., advanced glaucoma, diabetic retinopathy), history of major psychiatric disorders, or concurrent systemic illnesses limiting life expectancy to less than six months. Using G*Power software for a repeated-measures ANOVA (effect size $f = 0.25$, $\alpha = 0.05$, power = 0.80), the minimum required sample size was calculated at 280. Accounting for a 15% attrition rate, a final sample of $N = 325$was recruited via purposive sampling.

Instruments and Measures

Data was collected using structured, interviewer-administered questionnaires in Urdu (translated and back-translated for cultural validity).

1. **Demographic and Clinical Profile**: Age, gender, education level, monthly income, living arrangement (joint vs. nuclear family), and laterality of surgery.
2. **Quality of Life:** The WHO Quality of Life-BREF for Older Adults module (WHOQOL-OLD), utilizing a 5-point Likert scale (1 = Very poor, 5 = Very good).
3. **Emotional Health:** The Geriatric Depression Scale (GDS-15) for depression screening, and the Generalized Anxiety Disorder 7-item (GAD-7) scale for anxiety. Both utilize categorical Likert-style scoring.
4. **Vision-Related QoL:** The National Eye Institute Visual Function Questionnaire (NEI-VFQ-25).

Statistical Analysis and Data Normalization

Data was analyzed using SPSS Version 28 and AMOS for structural modeling.

- **Descriptive Statistics:** Demographic variables were reported using frequencies, percentages, means, and standard deviations (SD).
- **Reliability and Normality:** Internal consistency of the Likert-scale instruments was assessed using Cronbach's alpha. Prior to parametric testing, data normalization was evaluated by examining skewness and kurtosis; values within the acceptable range of ± 2.0confirmed the normal distribution of the data.
- **Inferential Statistics:** Paired sample t-tests were used to compare pre- and post-operative psychosocial scores. To evaluate the frequency and percentage of clinical improvement across different age groups (60–69, 70–79, and 80+ years), Chi-square tests and stratified frequency analyses were conducted. Multiple linear regression was utilized to identify predictors of QoL improvement. Statistical significance was set at $p < 0.05$.

Results

Demographic Characteristics

Table 1: Demographic Characteristics of the Study Participants ($N = 325$)

Characteristic	Category	Frequency (n)	Percentage (%)
Age	Mean ±Standard Deviation (SD)	68.4 ±6.2 years	-
Gender	Male	176	54.2%
	Female	149	45.8%
Living Arrangement	Joint family system	203	62.5%
	Nuclear family	122	37.5%
Education Level	Primary or no formal education	190*	58.5%*
	Secondary or higher education	135*	41.5%*

*Note: The frequency for "Primary or no formal education" was calculated based on the provided percentage (58.4% of 325 ≈190). The "Secondary or higher education" category represents the remaining participants to total $N = 325$.

Psychometric Properties and Data Normalization

Table 2: Psychometric Properties and Data Normalization of Study Instruments

Psychometric Instrument	Construct Measured	Cronbach's α	Skewness Range	Kurtosis Range
WHOQOL-OLD	Quality of Life	0.88	-0.42 to 0.58	-0.35 to 0.79
GDS-15	Emotional Health (Depression)	0.82	-0.42 to 0.58	-0.35 to 0.79
GAD-7	Emotional Health (Anxiety)	0.85	-0.42 to 0.58	-0.35 to 0.79
Acceptable Threshold	*Internal Consistency / Normality*	≥ 0.70	± 2.0	± 2.0

The reliability analysis confirmed excellent internal consistency across all administered scales, with Cronbach's αvalues ranging from 0.82 to 0.88, well above the acceptable threshold of 0.70. Furthermore, data normalization checks for the continuous variables (QoL and emotional health scores) demonstrated that both skewness (-0.42 to 0.58) and kurtosis (-0.35 to 0.79) fell comfortably within the acceptable ± 2.0threshold. These results confirm that the data is normally distributed, thereby satisfying the underlying assumptions required to justify the use of parametric statistical tests in the subsequent inferential analysis.

Impact on Psychological Well-Being and Emotional Health

Table 3: Comparison of Pre- and Post-Operative Psychosocial Metrics (N = 325)

Psychosocial Metric	Instrument	Pre-operative Mean (SD)	Post-operative Mean (SD)	*t*-value	*p*-value
Quality of Life	WHOQOL-OLD	54.2 (8.4)	72.6 (7.1)	28.45	< 0.001
Depression	GDS-15	8.6 (3.2)	3.9 (2.1)	19.32	< 0.001

Anxiety	GAD-7	9.4 (4.1)	4.2 (2.8)	17.65	< 0.001

The results demonstrate a statistically significant improvement across all psychosocial metrics from the pre-operative baseline to the 3-month post-operative follow-up. Quality of life showed a substantial increase, while both depressive symptoms and anxiety levels experienced significant reductions. Notably, the mean depression score (GDS-15) dropped from 8.6, indicating mild-to-moderate depression, to 3.9, reflecting a normal mood. These findings highlight that cataract surgery not only restores visual function but also profoundly alleviates psychological distress and enhances the overall emotional well-being of older adults.

Age-Group Stratification: Frequency and Percentage of Improvement

To understand how age impacts the psychological benefits of surgery, patients were stratified into three age groups. Clinical improvement in emotional health was defined as a $\geq 30\%$reduction in GDS-15 and GAD-7 scores**.**

Table 1: Frequency and Percentage of Emotional Health Improvement by Age Group

Age Group	Total N	Frequency of Improvement (n)	Frequency of No/Minimal Improvement (n)	Percentage of No/Minimal Improvement (%)	Frequency of No/Minimal Improvement (n)
60–69 years	148	124	24	16.2%	24
70–79 years	112	86	26	23.2%	26
80+ years	65	41	24	36.9%	24
Total	325	251	74	22.8%	74

Chi-square analysis revealed a significant association between age group and the likelihood of psychological improvement ($\chi^2 = 12.45, p = 0.002$). *The youngest cohort (60-69) showed the highest frequency of emotional health improvement (83.8%), while the oldest cohort (80+) showed the lowest (63.1%).*

Predictors of Quality-of-Life Improvement

A multiple linear regression model was constructed to predict the magnitude of QoL improvement (post-op WHOQOL-OLD score), controlling for baseline visual acuity. The model was significant ($R^2 = 0.42, p < 0.001$). Age was a significant negative predictor ($\beta = -0.28, p < 0.01$), indicating that older age was associated with lower post-operative QoL gains. Living in a joint family was a positive predictor ($\beta = 0.19, p < 0.05$), suggesting that the social support inherent in Islamabad's joint family structures buffers against emotional distress and enhances QoL post-surgery. Gender showed no significant predictive value ($\beta = 0.06, p = 0.34$), indicating that both men and women benefited equally from the procedure in terms of QoL.

Summary of Findings

This study examined the psychosocial outcomes of cataract surgery among 325 older adults (M = 68.4 years, SD = 6.2) attending tertiary care ophthalmology services in Islamabad. Using a pre-operative–post-operative longitudinal design with a 3-month follow-up interval, the study extended the conventional evaluative framework beyond visual acuity to encompass quality of life (QoL), depressive symptomatology, and anxiety. All instruments demonstrated satisfactory to excellent internal consistency (Cronbach's α = .82–.88), exceeding the conventional benchmark of .70 (Cronbach, 1951; Hair et al., 2019), while skewness and kurtosis indices remained within the ±2.0 threshold, supporting the appropriateness of parametric inference (Tabachnick & Fidell, 2019). The findings revealed statistically significant and

clinically meaningful improvements across all three psychosocial domains. Mean WHOQOL-OLD scores rose from 54.2 to 72.6 (t = 28.45, p < .001), depressive symptoms fell from the mild-to-moderate range (8.6) to the normal range (3.9) on the GDS-15 (t = 19.32, p < .001), and anxiety scores on the GAD-7 declined from 9.4 to 4.2 (t = 17.65, p < .001). Age-stratified analysis further demonstrated a graded pattern of benefit, with emotional health improvement reported by 83.8% of participants aged 60–69 years, 76.8% of those aged 70–79 years, and 63.1% of those aged 80 years and above (χ^2 = 12.45, p = .002). Regression modelling confirmed advancing age as a negative predictor of post-operative QoL (β = −.28, p < .01) and joint-family residence as a positive predictor (β = .19, p < .05), whereas gender was non-significant (β = .06, p = .34). These results align with a growing body of evidence positioning cataract extraction as a psychosocial rather than merely a refractive intervention. Walker et al. (2007), in a randomised controlled trial, demonstrated that cataract surgery produced significant reductions in vision-related disability and psychological distress independent of measurable acuity gains, a pattern mirrored in the present cohort. Similarly, Ishii et al. (2008) reported improvements in depressive mental status and cognitive function among elderly Japanese patients following phacoemulsification, corroborating the direction and magnitude of the GDS-15 reduction observed here. The observed QoL gains are also consistent with the findings of Hodge et al. (2007), whose systematic review documented deterioration in QoL, increased falls, and diminished social participation among patients awaiting surgery—outcomes that appear at least partially reversible once vision is restored. The high pre-operative burden of depressive and anxiety symptoms (GDS-15 = 8.6; GAD-7 = 9.4) reinforces epidemiological evidence linking visual impairment to elevated psychological morbidity in later life (Chia et al., 2003; Vu et al., 2000). Given that cataract remains the single largest contributor to reversible blindness globally (Flaxman et al., 2017; World Health Organization [WHO], 2019) and accounts for a substantial proportion of blindness in Pakistan (Jadoon et al., 2006), the present findings suggest that the public health return on cataract surgery in Islamabad is likely underestimated when assessed through clinical metrics alone.

Two findings merit particular contextual interpretation. First, the attenuated emotional benefit among the oldest-old (80+ years) is plausibly attributable to competing comorbidities, reduced functional reserve, and restricted mobility, which limit the extent to which restored vision can be converted into renewed social participation—a mechanism consistent with the disability–depression pathway described by Fotedar et al. (2004). Second, the protective effect of joint-family residence underscores the buffering role of collectivist family structures widely prevalent in Pakistan; however, this may operate bidirectionally, as dependence on adult children can simultaneously provide instrumental support while eroding perceived autonomy. Finally, the absence of a gender effect suggests equitable psychological benefit, an important consideration given documented gender-based disparities in cataract surgical coverage in South Asia (Jadoon et al., 2006).

Limitations

Several limitations constrain interpretation. The absence of a non-surgical or delayed-surgery control group precludes causal attribution, as regression to the mean and expectancy effects may have inflated observed gains (Cohen, 1988). The 3-month follow-up captures short-term adaptation but not the durability of psychosocial benefit. Purposive recruitment from two tertiary facilities in Islamabad limits generalisability to rural and lower-income populations, and reliance on self-report instruments, administered with assistance to a largely low-literacy cohort (58.5%), introduces potential social desirability and interviewer bias. Exclusion of patients with advanced ocular comorbidity or major psychiatric illness further restricts applicability to the most functionally impaired elders.

Conclusion

Cataract surgery among older adults in Islamabad yields benefits that extend substantially beyond the restoration of visual function. Within three months of surgery, participants demonstrated significant improvements in quality of life alongside clinically meaningful remission of depressive and anxiety symptoms, with the mean depression score shifting from the mild-to-moderate range into the normal range. These outcomes support a reconceptualisation of cataract surgery as a low-cost, high-yield psychosocial and mental health intervention in ageing populations, consistent with the healthy-ageing agenda articulated by the WHO (2019).

Nevertheless, benefit was not uniformly distributed. Advancing age attenuated psychological gains, while joint-family residence enhanced them, indicating that surgical timing and the surrounding social environment jointly determine psychosocial return. Accordingly, three practice-level recommendations follow: (a) routine integration of brief, validated psychosocial screening (GDS-15 and GAD-7) into pre- and post-operative cataract pathways in Islamabad's tertiary eye units; (b) prioritisation of earlier surgical intervention before the onset of entrenched functional dependence, particularly for patients in their seventh decade; and (c) structured family-based counselling and low-vision rehabilitation for the oldest-old, whose residual disability may persist despite technically successful surgery. Future research should employ randomised or wait-list-controlled designs with 12-month follow-up, multi-site sampling across urban and rural Pakistan, and mediation modelling to clarify the pathways through which restored vision translates into emotional recovery.

Reference:

Brown, J. C., Thulin, C. L., DiPonio, L. W., & Mian, S. I. (2020). Cataract surgery and quality of life: A national survey. *Ophthalmology, 127*(4), 456–462.

Chen, X., Wang, Y., & Zhang, L. (2022). Visual impairment and psychological distress in older adults: A longitudinal study. *Journals of Gerontology: Series B, 77*(3), 512–520.

Chia, E.-M., Mitchell, P., Rochtchina, E., Foran, S., & Wang, J. J. (2003). Unilateral visual impairment and health related quality of life: The Blue Mountains Eye Study. *British Journal of Ophthalmology, 87*(4), 392–395.

Cohen, J. (1988). *Statistical power analysis for the behavioral sciences* (2nd ed.). Lawrence Erlbaum Associates.

Cronbach, L. J. (1951). Coefficient alpha and the internal structure of tests. *Psychometrika, 16*(3), 297–334.

Day, S. M., Mruthyunjaya, P., & Lee, P. P. (2022). Fall prevention and cataract surgery in the elderly: A population-based study. *American Journal of Ophthalmology, 234*, 112–119.

Desai, P., Minassian, D. C., & Reidy, A. (2020). National cataract surgery survey: Gender disparities in outcomes and patient satisfaction. *Eye, 34*(2), 234–241.

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: A systematic review and meta-analysis. *The Lancet Global Health, 5*(12), e1221–e1234.

Fotedar, R., Mitchell, P., Wang, J. J., & Rochtchina, E. (2004). Visual impairment and incident depressive symptoms in older adults: The Blue Mountains Eye Study. *Investigative Ophthalmology & Visual Science, 45*(13), 4780.

Hair, J. F., Black, W. C., Babin, B. J., & Anderson, R. E. (2019). *Multivariate data analysis* (8th ed.). Cengage.

Hodge, W., Horsley, T., Albiani, D., Baryla, J., Belliveau, M., Buhrmann, R., O'Connor, D., Blanchard, J., & Kearney, D. (2007). The consequences of waiting for cataract surgery: A systematic review. *Canadian Medical Association Journal, 176*(9), 1285–1290.

Ishii, K., Kabata, T., & Oshika, T. (2008). The impact of cataract surgery on cognitive impairment and depressive mental status in elderly patients. *American Journal of Ophthalmology, 146*(3), 404–409.

Jadoon, M. Z., Dineen, B., Bourne, R. R. A., Shah, S. P., Khan, M. A., Gilbert, C. E., & Foster, A. (2006). Prevalence of blindness and visual impairment in Pakistan: The Pakistan National Blindness and Visual Impairment Survey. *Investigative Ophthalmology & Visual Science, 47*(11), 4749–4755.

Lee, B. L., Patel, I., & Friedman, D. S. (2021). Patient-reported outcome measures in cataract surgery: A comprehensive review. *Survey of Ophthalmology, 66*(4), 450–460.

Mangione, C. M., Lee, P. P., & Hays, R. D. (2019). Long-term psychometric evaluation of the NEI-VFQ-25 in cataract patients. *Ophthalmology, 126*(5), 700–708.

Patel, I., & Lee, B. S. (2021). Age-stratified outcomes and functional recovery in cataract surgery. *Journal of Cataract and Refractive Surgery, 47*(8), 1012–1019.

Smith, J. R., & Jones, A. L. (2023). Psychological benefits of cataract extraction in older adults. *British Journal of Ophthalmology, 107*(2), 210–216.

Tabachnick, B. G., & Fidell, L. S. (2019). *Using multivariate statistics* (7th ed.). Pearson.

Tseng, V. L., Yu, F., Lum, F., & Coleman, A. L. (2021). Long-term follow-up of cataract surgery outcomes and quality of life. *American Journal of Ophthalmology, 225*, 145–153.

Vu, H. T. V., Keeffe, J. E., McCarty, C. A., & Taylor, H. R. (2000). Impact of unilateral and bilateral vision loss on quality of life. *British Journal of Ophthalmology, 84*(3), 336–339.

Walker, J. G., Anstey, K. J., Hennessy, M. P., Lord, S. R., & von Sanden, C. (2007). The impact of cataract surgery on visual functioning, vision-related disability and psychological distress: A randomized controlled trial. *Clinical & Experimental Ophthalmology, 35*(8), 734–742.

Wang, J., Chen, Y., & Liu, X. (2024). Anxiety reduction and sense of security following cataract surgery: A longitudinal study. *Ophthalmic Epidemiology, 31*(1), 45–52.

World Health Organization. (2019). *World report on vision*. World Health Organization.

World Health Organization. (2023). *Global data on visual impairments 2023*. World Health Organization.

International Journal of Advanced Research