

Patients' Cataract Knowledge, Post-Surgery Anxiety and Patients' Satisfaction of Cataract Surgery in Surabaya General Hospital: Preliminary Study

Isa Taufiq¹, Eppy Setiyowati², Yayuk Ernawati^{3*}, Achmad Hidayatullah⁴, Ima Nadatien⁵, Faridah Umamah⁶

^{1,3,4}Master's Programme in Applied Nursing, Nahdlatul Ulama University Surabaya, Indonesia

^{2,5,6}Department of Nursing, Nahdlatul Ulama University Surabaya, Indonesia

1110024007@student.unusa.ac.id, eppy@unusa.ac.id, 1110024006@student.unusa.ac.id,

1110024012@student.unusa.ac.id, iman.69@gmail.com, umamafarida@unusa.ac.id

ABSTRACT

Article History:

Received : 29-10-2025

Revised : 10-12-2025

Accepted : 28-01-2026

Online : 31-01-2026

Keyword:

Cataract;

Health Education;

Post Surgery Anxiety;

Patient Knowledge;

Patient Satisfaction



*Patients' knowledge about cataracts, post-surgery anxiety and the satisfaction of cataract surgery services influence psychologist readiness, obedience, and all surgical experience. Understanding these factors are significant to design education intervention and effective perioperative psychosocial. **The study aims:** This cross-sectional descriptive preliminary study aimed to describe knowledge level, post-surgery anxiety and patients' satisfaction of cataracts surgery in Surabaya General Hospital on September 2025, in order to identify problems description which need service improvement. **Method:** This was consecutive samples of 56 cataract surgery patients. Data collected by structured knowledge questionnaire (validated; KR-20 = 0.82), Zung Self-Rating Anxiety Scale (ZSAS; $\alpha = 0.88$), and Patients' Satisfaction Questionnaire (PSQ 2017) adapted from PSQ-18 ($\alpha = 0.91$). Analysis data found descriptively as frequency, percentage, average, and deviation standard. **Result:** Most of the participants are female (58.9 %), aged 60-69 years old (48.2 %), and educated from low to medium level. The knowledge level which good is on 50.0 % of the participants (average 11.5 ± 2.0 from 15), medium level is on 17.9 %, and low level is on 32.1 %. Post-surgery anxiety in zero level is 53.6 % (average 45.0 ± 8.0), minor level is on 21.4 %, and major level is on 25.0 %. Major level satisfaction is on 58.9 % (average 39.5 ± 6.0 from 50), medium level is on 16.1 %, and minor level is on 25.0 %. Lower education level and informal job related by lower knowledge and satisfaction. **Conclusion:** This study shows mostly of the cataract surgery patients have lack of knowledge, major post-surgery anxiety, and low satisfaction. It needs better education intervention and appropriate, intense psychosocial support system as well. This finding gives prime important to serious discrepancy on the preparation and patients treatments nowadays, that needs further study and refinement to optimize patients' results and all experience of health services.*

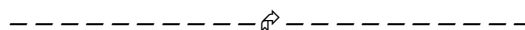
ABSTRAK

Pengetahuan pasien tentang katarak, kecemasan praoperasi, dan kepuasan terhadap layanan operasi katarak sangat memengaruhi kesiapan psikologis, kepatuhan, dan keseluruhan pengalaman bedah. Memahami faktor-faktor ini sangat penting untuk merancang intervensi edukasi dan psikososial perioperatif yang efektif. **Tujuan:** Studi pendahuluan deskriptif cross-sectional ini bertujuan untuk menjelaskan tingkat pengetahuan, kecemasan praoperasi, dan kepuasan pada pasien operasi katarak di RSUD Surabaya pada September 2025, guna mengidentifikasi gambaran permasalahan yang memerlukan perbaikan layanan. **Metode:** Menggunakan consecutive sampling 56 pasien operasi katarak, data dikumpulkan dengan kuesioner pengetahuan terstruktur (tervalidasi; KR-20 = 0,82), Zung Self-Rating Anxiety Scale (ZSAS; $\alpha = 0,88$), dan Kuesioner Kepuasan

Pasien (KKP 2017) yang diadaptasi dari PSQ-18 ($\alpha = 0,91$). Data dianalisis secara deskriptif sebagai frekuensi, persentase, rerata, dan standar deviasi. **Hasil:** Sebagian besar partisipan adalah perempuan (58,9%), berusia 60-69 tahun (48,2%), dan memiliki tingkat pendidikan rendah hingga sedang. Tingkat pengetahuan baik pada 50,0% partisipan (rerata $11,5 \pm 2,0$ dari 15), sedang pada 17,9%, dan kurang pada 32,1%. Kecemasan praoperasi tidak ada pada 53,6% (rerata $45,0 \pm 8,0$), ringan pada 21,4%, dan berat pada 25,0%. Kepuasan tinggi pada 58,9% (rerata $39,5 \pm 6,0$ dari 50), sedang pada 16,1%, dan rendah pada 25,0%. Tingkat pendidikan yang lebih rendah dan pekerjaan informal dikaitkan dengan pengetahuan dan kepuasan yang lebih rendah. **Kesimpulan:** Studi ini mengungkapkan bahwa sebagian besar pasien yang menjalani operasi katarak menunjukkan pengetahuan yang kurang, kecemasan praoperasi yang berat, dan kepuasan yang rendah. Hal ini menggarisbawahi perlunya intervensi edukasi yang lebih baik dan disesuaikan, serta sistem dukungan psikososial yang kuat. Temuan ini menyoroti kesenjangan kritis dalam persiapan dan perawatan pasien saat ini, yang memerlukan penelitian lebih lanjut dan perbaikan segera untuk mengoptimalkan hasil pasien dan keseluruhan pengalaman pelayanan kesehatan.



This is an open access article under the [CC-BY-NC-SA](https://creativecommons.org/licenses/by-nc-sa/4.0/) license



A. INTRODUCTION

Cataract is one of health issues faced by society in general, especially elderly people. This disease is indicated by eye-lens blurring which can disturb sight function and individual life quality. Without proper medication, cataract can cause blindness and limit someone's ability to go through their daily life. Therefore, good understanding about cataract and its medication procedure, such as phacoemulsification surgery, would be significant for the patients to prepare themselves better before having the surgery (Muhammad Fitriyanto et al., 2025; Ye, 2020).

One of the key factors which influenced patients' readiness to face cataract surgery is their knowledge about the disease and its treatment. Adequate knowledge will increase patients' obedience to the doctor's instructions, at the end will decrease their anxiety. The study shows the patients' who have good knowledge about their condition inclined calmer and got better results for the post-surgery (Dhaniswara et al., 2024; Maryam Sribayani et al., 2024; Muhammad Fitriyanto et al., 2025). Knowing more about cataract, patients can be ready more and confident facing the surgery.

Post-surgery anxiety is another challenge mostly experienced by the patients who will face the cataract surgery. Fear of the procedure, worry of sight losing, or another past negative experience mostly can increase the level of anxiety. These can interfere the recovery process and all the patients' experiences (Ayu My Lestari et al., 2024; Rahima et al., 2022). For those reasons, it's important to do some comprehensive approach, includes education intervention, and psychosocial support to help patients release their anxiety, (Kartika Cindy Fibrian et al., 2023; Ługowska et al., 2020).

Beside the knowledge and the anxiety, patients' satisfactions become important indicators to assess the quality of health services. Satisfaction level is influenced by good communication between the patients and medical staffs, and also the achievement in giving clear education about post-surgery procedure and treatment (Niazi et al., 2024; Zhang et al., 2025). By increasing the patients' satisfactions, we are able to create positive and effective experience on conducting cataract surgery (Samuel et al., 2021).

Reviewing the background above, this preliminary study aimed to observe the description of patients' knowledge about cataract, post-surgery anxiety, and patients' satisfaction of cataracts surgery services in Surabaya General Hospital. By analysing the data of 56 patients, the studier hopes this discovery is able to give valuable outlook and help the development of education program and better psychosocial intervention as well, hence, it can increase the services quality for cataract patients in the future.

B. METHODS

This preliminary study adopts quantitative descriptive design by cross-sectional approach, aimed to give comprehensive description about the level of patients' cataract knowledge, post-surgery anxiety, and the satisfactions of cataract surgery services in a certain time. (Rif'Ati et al., 2021; Suhre et al., 2020). The study is implemented in Surabaya General Hospital in September 2025. Surabaya General Hospital is chosen because of its role as a referral hospital with high volume of cataract cases which is possible to access the relevant population target.

The study population covers all the patients who conduct cataract surgery in Surabaya General Hospital in that period, with 56 patients' samples. Sampling done using sampling consecutive technique, the patients who fulfil the inclusion criteria and dispose to join consequently will be taken a part, so the sampling fulfilled, (Aftab, 2023; Dhaniswara et al., 2024). Inclusive criteria include cataract patients aged 50 years old who are able to communicate and dispose to fill the questionnaire and has signed the informed consent. In the other hand, the patients who has significant cognitive or mental disorder, refuse to join, or having serious complication that affect their valuation, will be excluded. Study variables consist of sociodemographic characteristics (gender, age, education level, and job), cataract knowledge level, post-surgery anxiety, and patients' satisfaction.

Collecting data done using structured questionnaire set. Cataract knowledge level measured by validated questionnaires that indicate good internal consistency by Content Validity Index (CVI) over 0.80 and alpha Cronbach reliability (0.91.), the score categorized to good, medium and low (Ye, 2020). Post-surgery anxiety assessed using Zung Self-Rating Anxiety Scale (ZSAS), the instruments have high reliability ($\alpha = 0.88$), and the result classified to zero anxiety, minor anxiety and major anxiety, (Ramadhan et al., 2021). Patients' satisfaction measured by Patients' Satisfaction Questionnaire (PSQ 2017), the adaptation of PSQ-18 in Bahasa Indonesia (Imaninda & Azwar, 2018) and indicates very good reliability ($\alpha = 0.91$), with satisfying category, medium and unsatisfying. Sociodemographic characteristics data also collected for giving general profile of the participants.

This study done by upholding etic principals strictly to protect rights and welfare of the participants. Before collecting data started, each participant given detail explanation about the study aimed, the procedure, risk potential, and the advantage of their participation. The explanation must be told clearly and comprehend to ensure each individual get complete understanding. The participants' personal data is guaranteed confidentiality; the collected information is used for the study aims only and processed anonymous to avoid individual identification.

The study emphasizes to the individual's rights to secede from the study anytime without any sanctions or negative consequence, explicitly it's conveyed to them. After all the information given and the participants have chance to ask and get clarifications, spoken and written agreement (informed consent) got by each individual who willingly to participate. This process holds participants' agreement voluntarily to participate in the study accordance to applicable standard ethics. For data collecting, participants asked to fill in the questionnaire independently. Data collected are analysed descriptively using SPSS version 26.0 software. The result analyses presented in a frequency, percentage, average (mean), and Deviation Standard (DS) to give comprehensive description about participants' sociodemographic characteristics,

and also the distribution of knowledge, anxiety, and their satisfaction. Data presentation is done transparently and objectively to ensure the validity and reliability the study's finding.

C. RESULT AND DISCUSSION

1. Result

Study result presented in participants' sociodemographic characteristics, and also the distribution of cataract knowledge level, post-surgery anxiety, and patients' satisfaction of cataract surgery services

Table 1. Sociodemographic Characteristics of Participants

Characteristic	Category	n	%
Sex	Male	23	41.1
	Female	33	58.9
Age category (years)	50-59	15	26.8
	60-69	27	48.2
	≥70	14	25.0
Education level	None	14	25.0
	Primary (SD)	10	17.9
	Junior High (SMP)	8	14.3
	Senior High (SMA)	14	25.0
	College/University	10	17.9
Profession	Farmer	18	32.1
	Merchant	15	26.8
	Unemployed	10	17.9
	Teacher	7	12.5
	Retiree/Military	6	10.7

Data shows that the majority of the participants is female, 33 persons (58.9 %), while male 23 persons (41.1 %). Participants' aged distribution end to elderly, the most aged category is 60-69 years old 27 persons (48.2 %). The patients aged 50-59 years old 15 persons (26.8%), and 14 persons (25.0%) 70 years old or more. This scheme consistent with the increasing of cataract prevalence along with aged rising.

Reviewed from the education background, the participants in this study show variety, though most of them have low and medium level. There are 14 persons (25.0 %) report do not have any formal education, and 10 persons (17.9 %) primary school graduated. The participants' middle school graduates are 8 persons (14.3 %), while 14 persons (25.0 %) graduated from high school. University graduated is the least with 10 persons (17.9 %). This education level heterogeneity is significant to be considered on education intervention planning.

The participants' profession mostly had informal job or unemployed. Farmer is the most professions 18 persons (32.2 %) followed by merchant 15 persons (26.8 %). Unemployed participants are 10 persons (17.9 %) including housewife, non-formal retiree. Another profession is teacher (7 persons: 12.5 %) and Indonesian National Armed Forced retiree are the minority.

Table 2. Distribution of Knowledge, Anxiety, and Satisfaction Levels (N = 56)

Variable	Category	n	%	Mean ± SD
Knowledge	Good	28	50.0	11.5 ± 2.0
	Medium	10	17.9	-

Variable	Category	n	%	Mean ± SD
Post-surgery Anxiety	Low	18	32.1	-
	Not anxious	30	53.6	45.0 ± 8.0
	Minor	12	21.4	-
	Major	14	25.0	-
Patient Satisfaction	Satisfied	33	58.9	39.5 ± 6.0
	Medium	9	16.1	-
	Dissatisfied	14	25.0	-

Its 50.0 % of the patients have good knowledge, the average score is 11.5 ± 2.0 of the 15. Although the rate shows half of the participants have good knowledge, there are 32.1 % have low knowledge, while 17.9 % in medium knowledge. It shows that the challenge must be resolved in order to increase the patients' awareness and understanding about cataract.

In another side, post-surgery anxiety measured using Zung Self-Rating Anxiety Scale (ZSAS) and shows that 30 participants (53.6 %) have not anxious. The rate is balanced by 25.0 % of the participants have major anxiety and 21.4 % have minor anxiety. The anxiety average score is 45.0 ± 8.0 , it shows that though half of the patients calm, the significant proportion intends anxiety indication. This post-surgery anxiety becomes important concerned, as its influence to the patients' readiness and the result of medical procedure.

At last, the evaluation of patients' satisfaction to the services they get shows that 33 participants (58.9 %) feel satisfied. Only 25.0 % feel unsatisfied, while 16.1 % feel medium satisfied. The average satisfaction scores 39.5 ± 6.0 of 50.

Table 3. Descriptive Statistics of Key Variables

Variable	Mean	SD	Min	Max
Age (years)	64.3	6.4	52	75
Knowledge score (0-15)	11.5	2.0	7	14
Anxiety score (20-80)	45.0	8.0	35	70
Satisfaction score (10-50)	39.5	6.0	25	49

The data shows descriptive statistics of the key variables in this study, includes age, knowledge score, anxiety score, and patients' satisfaction score. Age average of the patients is 64.3 years old by standard deviation (SD) 6.4 years old. It shows that most of the patients are on the elderly aged, range 52 to 75 years old. Older aged is the risky factor at the cataract development, so it's important to take the consideration on the medical service context and educational intervention.

On knowledge score, it's gotten average on 11.5 by standard deviation 2.0 the maximum is 15. The value range of the score is varied 7 to 14, it shows there is significant differences about patients' understanding of cataract. The average score of post-surgery anxiety is 45.0, by standard deviation 8.0 the minimum score is 35 and the maximum is 70. That's why, although half of the patients have not anxious, there is significant percentage of the patients who have major anxiety. Patients' anxiety that measured by Patients Satisfaction Questionnaire (PSQ 2017) generates the average 39.5 by standard deviation 6.0 shows the range 25 to 49.

Table 4. Cross-Tabulation of Cataract Knowledge Level

Characteristics	Category	Good (n, %)	Medium (n, %)	Low (n, %)	Total (n)
Gender	Male	12 (52.2%)	5 (21.7%)	6 (26.1%)	23
	Female	16 (48.5%)	5 (15.2%)	12 (36.4%)	33
Age	50–59 years old	9 (60.0%)	3 (20.0%)	3 (20.0%)	15
	60–69 tahun	14 (51.9%)	4 (14.8%)	9 (33.3%)	27
	≥70 tahun	5 (35.7%)	3 (21.4%)	6 (42.9%)	14
Education	No Formal Education	3 (21.4%)	2 (14.3%)	9 (64.3%)	14
	Elementary School	4 (40.0%)	2 (20.0%)	4 (40.0%)	10
	Secondary School	4 (50.0%)	0 (0.0%)	4 (50.0%)	8
	Senior School	8 (57.1%)	2 (14.3%)	4 (28.6%)	14
	University	5 (50.0%)	4 (40.0%)	1 (10.0%)	10
Profession	Farmer	10 (55.6%)	2 (11.1%)	6 (33.3%)	18
	Merchant	9 (60.0%)	2 (13.3%)	4 (26.7%)	15
	Unemployed	3 (30.0%)	1 (10.0%)	6 (60.0%)	10
	Teacher	4 (57.1%)	1 (14.3%)	2 (28.6%)	7
	Retiree/Army	2 (33.3%)	2 (33.3%)	2 (33.3%)	6

Table 5. Cross-Tabulation of Post-Surgery Anxiety Level

Characteristics	Category	Not anxious (n, %)	Minor Anxiety (n, %)	Major Anxiety (n, %)	Total (n)
Gender	Male	13 (56.5%)	5 (21.7%)	5 (21.7%)	23
	Female	17 (51.5%)	7 (21.2%)	9 (27.3%)	33
Age	50–59 years old	9 (60.0%)	3 (20.0%)	3 (20.0%)	15
	60–69 years old	15 (55.6%)	5 (18.5%)	7 (25.9%)	27
	≥70 years old	6 (42.9%)	4 (28.6%)	4 (28.6%)	14
Education	No Formal Education	4 (28.6%)	3 (21.4%)	7 (50.0%)	14
	Elementary School	5 (50.0%)	1 (10.0%)	4 (40.0%)	10
	Secondary School	4 (50.0%)	2 (25.0%)	2 (25.0%)	8
	Senior School	9 (64.3%)	3 (21.4%)	2 (14.3%)	14
	University	8 (80.0%)	1 (10.0%)	1 (10.0%)	10
Profession	Farmer	10 (55.6%)	4 (22.2%)	4 (22.2%)	18
	Merchant	8 (53.3%)	3 (20.0%)	4 (26.7%)	15
	Unemployed	5 (50.0%)	3 (30.0%)	2 (20.0%)	10
	Teacher	4 (57.1%)	1 (14.3%)	2 (28.6%)	7
	Retiree/Army	3 (50.0%)	0 (0.0%)	3 (50.0%)	6

Table 6. Cross-Tabulation of Patient Satisfaction Level (PSQ 2017)

Characteristics	Category	Satisfied (n, %)	Medium (n, %)	Dissatisfied (n, %)	Total (n)
Gender	Male	14 (60.9%)	3 (13.0%)	6 (26.1%)	23
	Female	19 (57.6%)	6 (18.2%)	8 (24.2%)	33

Characteristics	Category	Satisfied (n, %)	Medium (n, %)	Dissatisfied (n, %)	Total (n)
Age	50–59 years old	10 (66.7%)	2 (13.3%)	3 (20.0%)	15
	60–69 years old	15 (55.6%)	4 (14.8%)	8 (29.6%)	27
	≥70 years old	8 (57.1%)	3 (21.4%)	3 (21.4%)	14
Education	No Formal Education	6 (42.9%)	2 (14.3%)	6 (42.9%)	14
	Elementary School	6 (60.0%)	2 (20.0%)	2 (20.0%)	10
	Secondary School	5 (62.5%)	1 (12.5%)	2 (25.0%)	8
	Senior School	9 (64.3%)	2 (14.3%)	3 (21.4%)	14
	University	7 (70.0%)	1 (10.0%)	2 (20.0%)	10
	Profession	Farmer	11 (61.1%)	2 (11.1%)	5 (27.8%)
	Merchant	9 (60.0%)	2 (13.3%)	4 (26.7%)	15
	Unemployed	5 (50.0%)	2 (20.0%)	3 (30.0%)	10
	Teacher	5 (71.4%)	1 (14.3%)	1 (14.3%)	7
	Retiree/Army	3 (50.0%)	0 (0.0%)	3 (50.0%)	6

The patients' age distribution mostly from 60-69 years old ages (27 patients), followed by 50-59 years old ages (15 patients) and ≥70 years old (14 patients). Patients' education level is varied, the significant number is having no formal education (14 patients), followed by the elementary graduation patients (10 patients) and the secondary graduation (22 patients). Most of the patients also have varied professions background, farmer (18 patients) and merchant (15 patients) become general professions. 50 % of the patients have good knowledge about cataract, while 32.1 % have low knowledge. 52.2 % male and 48.5% female have good knowledge, but the female presents higher proportion for low knowledge. The 50 – 59 years old patients have good knowledge also (60%), while the older patients (≥70 years old) present higher proportion for low knowledge.

Post-surgery anxiety data presents 53.6% patients have no anxious, but 25% patients have major anxiety. There is interesting pattern; younger patients (50-59 years old) presents lower anxiety level (60% no anxious), while older patients (≥70 years old) have major anxiety (28.6%). Although relatively male and female have balancing anxiety, female tends to have higher anxiety level. Primarily, 58.9% patients feel satisfied or very satisfied, though there is unsatisfied proportion (25%) which must be noticed further. Higher satisfaction level found at male (60.9% satisfied) than at female (57.6% satisfied). The patients aged 50 to 59 years old present the highest level of satisfaction, with a percentage of 66.7%. While patients aged ≥70 years old present higher level dissatisfaction proportion (21.4%)

2. Discussion

The result of the study presents 50% of the patients have good knowledge about cataract, but 32.1% have low knowledge. This knowledge distribution deeply affected by demography. Perceived that education level becomes key factor. High educated patients (Senior and University) present higher and better knowledge (57.1% and 50%) than the patients who have no informal education (21.4%) or elementary graduated (40%). This phenomena is consistent with Caroline's finding (2021), which connects the education level with patients' knowledge to their medical condition. Age category also presents interesting pattern; patients aged 50 to 59 have the highest good proportion knowledge (60%), while aged ≥70 years old present medium knowledge (42.9%). It aligns with the research of Samuel et al. (2021), aged factor affects to society's knowledge about cataract. Knowledge gap indicates elderly and low education

individual may need more intensive and suitable education approach, as deduced by Du et al (2022) to assure the benefit and risk of cataract surgery understanding.

Post- surgery Anxiety Level presents that 53.6% patients have no anxious, but 25% have major anxiety. This number confirms there is a necessity to intervene the targeted anxiety reduction. By the demography analysis, low educated patients (not schooled) presents excessive major anxiety (50%), higher than another education category, especially university category that only has 10% of major anxiety. It indicates that less of knowledge or education literacy can cause higher anxiety (Arina & Putri, 2024; Hu et al., 2025; Rahima et al., 2022). Patients aged ≥ 70 also presents significant major anxiety proportion (28.6%), as another susceptible category. This finding support by Floros (2024), found that significant post-surgery anxiety relates to risk that felt.

Patient Satisfaction Level (PSQ 2017): overall 58.9% patient state satisfied or very satisfied, it presents in general that the services quality is good, though 25% patient feels unsatisfied. Similar to the knowledge pattern, education level correlated positively to the satisfaction. University educated patient presents the highest satisfaction (70%), while the patients have no formal education has the highest proportion of dissatisfaction (42.9%). In accordance with the study of Sakti et al. (2022), which research the factors of patients satisfaction in eye clinic. Higher dissatisfaction at the low education category reflects the difference on expectation, communication, or understanding about received treatment. This finding can be related as well to Alabdali & Husain (2025), which emphasizes services quality as the patients' satisfaction. Besides that, Yotsukura et al (2020), presents that subjective satisfaction and happiness of patient can increase after the cataract surgery, underlined the importance of ensuring the patients' positive experience.

D. CONCLUSION AND SUGGESTIONS

Although most of the patient have good education of cataract, significant percentage of patients still have low knowledge, especially to the patients who have low education and elderly age category (≥ 70 years old). It emphasizes the necessity of easy access and more adaptive education program for this susceptible category. Most of the patients have no anxious, but quarter of the study's population presents major anxiety. The patients with low education and elderly aged category present higher susceptible to the post-surgery anxiety, related to the other study findings. It emphasizes the importance of intervene targeted psychosocial and education to reduce pre-surgery emotional pressure. The majority of the patients state the satisfaction for the services, but the low education patients tend to have higher dissatisfaction

Based on this study findings, further study is recommended to explore the effectiveness of intervention targeted education and psychosocial, especially for the low education patients and elderly aged, to increase the knowledge, reduce pre-surgery anxiety, and increase post-surgery satisfaction. Future study may able to be focussed on longitudinal evaluation to measure long-term effects of this intervention to the life quality of cataract patients, also explore the role of psychologist factors, as self-efficacy and social support on mediating the relation between demographics characteristics and patient's result

E. ACKNOWLEDGEMENT

The author would like to express his deepest gratitude to the satisfied patients of cataract surgery at Surabaya General Hospital and all the parties who have assisted in this study

F. REFERENCES

Aftab, A. (2023). Comparison of safety and effectiveness between phacoemulsification and suture less small incision procedures in cataract surgery. *Journal of University Medical and Dental College*, 14(3), 650–654. <https://doi.org/10.37723/jumdc.v14i3.819>

- Alabdali, M. A., & Husain, K. S. (2025). Understanding the relationship between patient satisfaction and loyalty through telemedicine platform quality: An empirical study. *International Journal of Healthcare Management*, 18(2), 253–265. <https://doi.org/10.1080/20479700.2023.2290351>
- Arina, & Putri, D. S. R. (2024). *Application Of Ar Rahman Murrotal Therapy And Benson Relaxation To Reduce Anxiety In Cataract Preoperative Patients At Rsu Assalam*. 1–10. <https://eprints.ukh.ac.id/id/eprint/8443/2/NAS PUB ARINA %281%29.pdf>
- Ayu My Lestari, Any Kurniawati, Adin Syaefudin, & Dwi Retno Handayani. (2024). Hubungan Pengetahuan Perioperatif dengan Tingkat Kecemasan pada Pasien Pre Operasi Katarak di RSU Bhakti Asih Tangerang. *Termometer: Jurnal Ilmiah Ilmu Kesehatan Dan Kedokteran*, 2(1), 292–299. <https://doi.org/10.55606/termometer.v3i1.4975>
- Caroline, I. (2021). *Hubungan Antara Tingkat Pendidikan, Penghasilan, Dan Pekerjaan Terhadap Pengetahuam Pasien Tentang Penggunaan Kortikosteroid Yag Dapat Menyebabkan Katarak*. 96.
- Dhaniswara, A. A., Saubig, A. N., Pramono, D., & Nugraheni, A. (2024). Hubungan Antara Tingkat Pengetahuan dan Perilaku Tentang Katarak Diabetika Penderita Diabetes Mellitus dengan Kejadian Katarak di Puskesmas Gunung Pati Semarang. *Jurnal Epidemiologi Kesehatan Komunitas*, 9(2), 146–152. <https://doi.org/10.14710/jekk.v9i2.16396>
- Du, K., Guan, H., Zhang, Y., Ding, Y., & Wang, D. (2022). *Knowledge of cataracts and eye care utilization among adults aged 50 and above in rural Western China*. 10. <https://doi.org/10.3389/fpubh.2022.1034314>
- Floros, G. (2024). Significant Preoperative Anxiety Associated with Perceived Risk and Gender in Cataract Surgery. *Journal of Clinical Medicine*, 13(17). <https://doi.org/10.3390/jcm13175317>
- Hu, S., Wey, S., Yano, R. A., & Kelly, L. D. (2025). Fear of Cataract Surgery and Vision Loss: The Effects of Health Literacy and Patient Comprehension at an Academic Hospital-Based Eye Clinic. *Clinical Ophthalmology*, 19, 1103–1110. <https://doi.org/10.2147/OPHTH.S490630>
- Imaninda, V., & Azwar, S. (2018). Modifikasi Patient Satisfaction Questionnaire Short Form (PSQ-18) ke dalam Bahasa Indonesia. *Gadjah Mada Journal of Psychology (GamaJoP)*, 2(1), 8. <https://doi.org/10.22146/gamajop.31864>
- Kartika Cindy Fibrian, Chriswardani Suryawati, & Suhartono. (2023). Peran Komunikasi dan Edukasi Pra Operatif terhadap Kepuasan Pasien Pasca Operasi Katarak : Literature Review. *Media Publikasi Promosi Kesehatan Indonesia (MPPKI)*, 6(2), 222–231. <https://doi.org/10.56338/mppki.v6i2.3090>
- Ługowska, D., Konopinska, J., Mariak, Z., & Obuchowska, I. (2020). Comparison of subjective preoperative experiences of patients before first-or second-eye cataract surgeries. *Clinical Ophthalmology*, 14, 2883–2889. <https://doi.org/10.2147/OPHTH.S270196>
- Maryam Sribayani, null, Donny Tri Wahyudi, null, Sulidah Sulidah, null, Ana Damayanti, null, & Darni Darni, null. (2024). Relaksasi Benson Terhadap Kecemasan Pasien Lansia Dengan Katarak Di RSUD dr. H. Jusuf SK. *NAJ: Nursing Applied Journal*, 2(1), 157–164. <https://doi.org/10.57213/naj.v2i1.238>
- Muhammad Fitriyanto, Prastiwi, D., & Nonik Eka Martyastuti. (2025). Hubungan Tingkat Pengetahuan Pasien dengan Tingkat Kecemasan Pasien Pre Operasi Katarak di Poli Mata RSUD Bendan Kota Pekalongan. *Pena Nursing*, 3(01), 1–9. <https://doi.org/10.31941/pn.v3i01.5510>
- Niazi, S., Gatzioufas, Z., Dhubhghaill, S. N., Moshirfar, M., Faramarzi, A., Mohammadi, F., Kheiri, B., Peyman, A., Heidari, M., & Doroodgar, F. (2024). Association of Patient Satisfaction with Cataract Grading in Five Types of Multifocal IOLs. *Advances in Therapy*, 41(1), 231–245. <https://doi.org/10.1007/s12325-023-02698-5>
- Rahima, P., Irawan, E., Tania, M., Royana, S., & Iklima, N. (2022). Pre-Operasi Katarak Di Rumah Sakit. *Jurnal Keperawatan BSI*, 10(2), 241–249.
- Ramadhan, Rustandi, & Purnama. (2021). Association between Knowledge with Anxiety Level of Pre Operating on Patients with Cataract. *Advanced Nursing & Patient Care International Journal (ANPCIJ)*, 4(2). <https://academicstrive.com/submit-manuscript.php>
- Rif'Ati, L., Halim, A., Lestari, Y. D., Moeloek, N. F., & Limburg, H. (2021). Blindness and Visual Impairment Situation in Indonesia Based on Rapid Assessment of Avoidable Blindness Surveys in 15 Provinces. *Ophthalmic Epidemiology*, 28(5), 408–419. <https://doi.org/10.1080/09286586.2020.1853178>
- Sakti, D. H., Mahayana, I. T., Firdaus, A. T., Utami, T. P., Jati, K. D. P., Wardhana, F. S., & Handayani, N. (2022). Patients' Satisfaction with Ophthalmology Clinic Services in a Public Teaching Hospital.

Patient Preference and Adherence, 16, 723–735. <https://doi.org/10.2147/PPA.S347394>

- Samuel, M., Abdulkadir, H., Girma, M., & Glagn, M. (2021). Assessment of knowledge and attitude of cataract and their associated factors among adults in Arba Minch Zuria Woreda, Southern Ethiopia. *Clinical Ophthalmology*, 15, 2913–2920. <https://doi.org/10.2147/OPHTH.S320873>
- Suhre, W. M., O'Reilly-Shah, V. N., & Van Cleve, W. (2020). Cannabis use is associated with a small increase in the risk of postoperative nausea and vomiting: a retrospective machine-learning causal analysis. *BMC Anesthesiology*, 20(1), 1–8. <https://doi.org/10.1186/s12871-020-01036-4>
- Ye, G. (2020). Knowledge about benefits and risks of undergoing cataract surgery among cataract patients in Southern China. *International Ophthalmology*, 40(11), 2889–2899. <https://doi.org/10.1007/s10792-020-01473-7>
- Yotsukura, E., Ayaki, M., Nezu, N., Torii, H., Arai, H., Sakatani, K., Tsubota, K., & Negishi, K. (2020). Changes in patient subjective happiness and satisfaction with cataract surgery. *Scientific Reports*, 10(1), 1–8. <https://doi.org/10.1038/s41598-020-72846-2>
- Zhang, J., Zhou, D., Zhu, J., Zhu, J., Zou, X., Liu, Z., & Deng, G. (2025). Day care and inpatient cataract patient satisfaction with in-patient services at a Jiangsu public tertiary A hospital. *BMC Health Services Research*, 25(1). <https://doi.org/10.1186/s12913-025-13027-7>