

Egyptian Journal of Clinical Ophthalmology "EJCO"

An International peer-reviewed journal published bi-annually



Volume 7, Issue 2, Dec. 2024: pp: 147-157

www. ejco.sohag-univ.edu.eg

Original Article

UNHAPPY PATIENTS AFTER UNEVENTFUL PHACOEMULSIFICATION

Mohammed, M.

Ophthalmology dept., Faculty of Medicine, Suez Univ., Suez, Egypt

*E-mail: mohammedopth@gmail.com

Received: 22/10/2024 Accepted: 15/12/2024

Doi: 10.21608/ejco.2024.404125

Abstract

Background: For the majority of cataract patients, uneventful phacoemulsification resulted in a good visual outcome. However, some patients came unhappy with their results even with perfectly done cataract surgery. These unexpected bad outcomes were so frustrating both for surgeons and patients. As a result, patient happiness is the end goal to evaluate and improve our provided health service. Aim of the study: to describe the prevalence and causes of unhappy patients after uneventful phaco-emulsification in our practice in Suez general hospital. Patients and Methods: This prospective cohort study was conducted at the Ophthalmology Outpatient Clinic of Suez General Hospital on 100 patients that underwent uncomplicated phacoemulsification in the period from February to April 2024 with the same surgeon and was randomly selected from the theatre list and records after 2 months from surgery time. All selected patients were recalled and subjected to a face-to-face questionnaire to measure their satisfaction level. In the dissatisfied group, all patients were subjected to full history taking, visual acuity assessment, anterior and posterior segment examinations, ultrasonography, and optical coherence tomography. The data collection tool PSQ-18 was used to evaluate patient satisfaction. The validated questionnaire was done and completed by the researcher 2 months after the operation and was translated by the forward-backward method. Results: Among the patients that were chosen, 70% were satisfied and 30% were dissatisfied. The PSQ-18 questionnaire score showed that time spent with the doctor had the best scoring, followed by communications, interpersonal manner, financial aspects, technical quality, accessibility and convenience. The overall satisfaction of patients was (4.0 ± 0.6). Regarding scales of dissatisfaction, dissatisfied patient had significantly lower mean score in financial aspect, convenience and general satisfaction score (P<0.05). Regarding causes of dissatisfaction, the technical issues of the surgeries was prominent, and the causes of unhappiness were as following: residual refractive error constituted (43.3%), dysphotopsia (30.0%), ocular surface disorders (16.7%) and posterior segment disorders (10.0%). Conclusion: Physician accessibility and technical quality showed the most evidence, whereas the physical environment and economical aspects had the least link with overall satisfaction. We ought to pay closer attention to our disgruntled patient who underwent a straightforward surgery in order to identify the reasons for his dissatisfaction and enhance the quality of care we offer.

Keywords: Cataract, Patient satisfaction, Phacoemulsification, PSQ-18.

1. Introduction

cases worldwide and 45% of all blindness cases [1]. Presently, cataract surgery stands

as one of the most common and effective medical operations, with an estimated 20

million cases performed annually worldwide [2]. One modern technique for cataract extraction is phacoemulsification. For the intended use, phacoemulsification is regarded as one of the safest and most successful techniques [3,4]. Phacoemulsification has a low risk of complications, a quick recovery period, and great clinical outcomes. Consequently, it is accompanied by surgeon and patient expectations that are constantly rising [5]. Successful phacoemulsification can improve not only the patient's vision but also their life quality as sleep and gait, whereas poor phacoemulsification can lead to dissatisfaction and depression [6]. even with an uncomplicated phacoemulsification. Nonetheless, we've all had patients walk into our clinic dissatisfied with their results from cataract surgery, and it probably happens more frequently than we would want. And so, this condition is extremely frustrating both for patient and surgeon specially with straightforward surgery [7]. Surgery and the type of intraocular lens (IOL) might have unfavorable consequences that can accidentally adversely affect quality of life and vision, impacting both physical and mental health [8-10]. There is evidence linking post operative dry eye disease (DED) to mental health problems, psychiatric diseases, and psychiatric drugs

2. Subjects and Methods2.1. Study design and populations

This research was approved by the Research Ethics Committee of Faculty of Medicine, Suez University (Med-IRB/21) on 16th of January 2024. Official approval from Suez general hospital and consents from patients were taken for participating in the study and for publishing results. This prospective cohort study was carried out in the Ophthalmology Outpatient Clinic of Suez General Hospital in the period from February to April 2024. On all patients who, in the previous two months, had undergone uneventful phacoemulsification with monofocal single

[11]. Significant emphasis is given to patient satisfaction with medical care from physicians. Therefore, it is important to identify weaknesses in systems to aid improvement through the patient's view. This can be accomplished by comparing interventions and making use of the short, validated Patient Satisfaction Questionnaire Short Form (PSQ-18), which can be used in a variety of settings [12,13]. Patients may be dissatisfied with their cataract surgery results for a number of reasons. The six most common reasons are as follows: untreated or inadequately treated ocular surface disease; residual refractive error; inappropriate expectations (a result of inadequate communication between the surgeon and the patient); problems with vision quality (dysphotopsias or perceived "poor quality" vision); pre-existing conditions; and intra- or postoperative complications [14,15]. Assessing patient dissatisfaction following uneventful phacoemulsification at the single surgical hospital in Suez was the objective of this study. The primary objectives of this study were to determine the prevalence and reasons behind patient dissatisfaction as well as to gather general characteristics of unhappy patients who underwent uncomplicated phacoemulsification.

piece IOL implantation in one eye only, performed by the same surgeon and under local anesthesia by the same anesthesiologist. The following patients were excluded from the study: those patients with preoperative visually significant comorbidity (retinal or optic nerve damage, glaucoma, corneal or vitreous opacities, amblyopia), patients with intraoperative complications (capsular rupture, IOL out of the capsular bag) and patients with early postoperative complications (such as corneal oedema, significant inflammation, tilted intraocular lens, best corrected

vision under 0.1 – unexpected vision loss). The total number of patients who met the criteria was 120; those were randomly selected from medical records and theatre lists two months postoperatively. Twenty of the 120 adult patients who were recalled back and invited to participate in the trial were declined due to no response on call. As a result, 100 individuals, ages 40 to 80, were selected and recalled to attend follow-up appointments following

2.2. Data collection

The researcher used the questionnaire to conduct one-on-one, in-person interviews with each patient. To ensure that no patient was excluded owing to incapacity to read due to either literacy or visual loss, all patients were interviewed to minimize any potential differences that could exist between interviewing versus self-administering the questionnaire. After their follow-up visit following surgery, they were all interviewed at the clinic.

2.3. The PSQ-18 short form Questionnaire

The PSQ-18 questionnaires have eighteen questions and a Likert scale with response options between 1 and 5. The 18 questions' scores were split into 7 subscales of the PSQ-18, which are as follows: 2 questions on general satisfaction; 4 ques-

2.4. Translation of the PSQ-18 Questionnaire

Using forward and backward translation techniques, the PSQ-18 was translated into Arabic. The viability of the questionnaire, that is, its comprehensiveness, time required to complete the survey,

2.5. Ophthalmic examination

History taking including sociodemographic details such as age, gender, marital status, degree of education, occupation, and income were noted, Uncorrected and best corrected visual acuity were assessed using a Snellen chart, and near vision was evaluated. The autorefractometer (Topcon 8000, Tokyo, Japan) was used to measure the errors of refraction, The anterior segment was evaluated with regard to

2.6. Statistical analysis

The Statistical Package for Social Science (SPSS) version 28 database software

phacoemulsification surgery by two months in hospital outpatient clinic. All included patients were Subjected to a validated PSQ-18 questionnaire that was performed by the researcher himself to detect the level of dissatisfaction and then all dissatisfied patients were subjected to a detailed ophthalmological examination and determination of the level of dissatisfaction as minimal/annoying/debilitating.

During the interview, no one other than the patient was permitted to be involved. After getting the patients' verbal assent, the researcher performed the interviews after giving a brief explanation of the study's goal to them. Every patient's complete medical history was obtained, and sociodemographic details such as age, gender, marital status, degree of education, occupation, and income were noted.

tions on technical quality; 2 questions on interpersonal manners; 2 questions on communication; 2 questions on financial aspect; 2 questions on time spent with a doctor; and 4 questions on accessibility and convenience [13].

and other factors was then tested on ten patients who had undergone cataract surgery at the Suez general hospital. After the pilot, just a few modifications were made to the questionnaire [13].

pupil size, IOL centration, capsulorhexis size, ocular surface condition assessment using corneal staining and tear break up time and intraocular pressure assessment, posterior segment examination, ultrasonography using (E-Z Scan, Sonomed, USA) and optical coherence topography of the macula using (Cirrus 5000HD, Carl Zeiss, Germany).

was used to analyse the data collected on a computer. Frequencies and percentages were used to represent qualitative data. The mean and standard deviation (SD) of quantitative variables were calculated. Fisher tests or chi square (χ 2) were utilised to find relationships between various qualitative variables. Use of the odds

ratio (OR) and 95% confidence intervals (CI) allowed for the determination of the risk associated with each group. A difference was considered statistically significant if the P value was less than 0.05.

3. Results

3.1. Baseline sociodemographic characteristics

After recalling 120 participants, 100 agreed to take part in the study and this number constituted the final sample size. The mean age of the patients screened was 66.8 ± 19.5 years (ranging 40 - 80), patients were 53% males and 47% females. Patients were further divided

according to age groups. Maximum patients were within the age group of >60-70 (45.0%), followed by >50-60 years (27.0%). The majority of patients were married (79.0%), unemployed (43.0%) and low-income level (49.0%), tab. (1).

Table 1: Baseline sociodemographic characteristics of the study population.

Variables	Total (n=100)
Age (years)	66.8 ± 19.5
Age groups	
4 0-50	12 (12.0%)
• >50-60	27 (27.0%)
■ >60-70	45 (45.0%)
■ >70-80	16 (16.0%)
Gender	
■ Male	53 (53.0%)
■ Female	47 (47.0%)
Marital Status	
■ Single	4 (4.0%)
■ Married	79 (79.0%)
■ Divorced	17 (17.0%)
Education level	
■ Illiterate	19 (19.0%)
■ Primary	28 (28.0%)
■ Secondary School	32 (32.0%)
■ University	21 (21.0%)
Occupation	
■ Housewife	18 (18.0%)
■ Employed	39 (39.0%)
■ Unemployed	43 (43.0%)
Income Level	
■ Low	49 (49.0%)
■ Middle	39 (39.0%)
■ High	12 (12.0%)

3.2. Dissatisfaction prevalence and associated sociodemographic characteristics

Out of all the study population, 30.0% were dissatisfied. The socio-demographic characteristics of patients who were "satisfied" and those "dissatisfied" are

reported in tab. (2). The satisfied patients were older than dissatisfied patients with mean age 70.5 ± 20.1 years. Maximum dissatisfied patients were within the age

group of >60-70 (50.0%), followed by >50- 60 years (30.0%). Higher dissat-

isfaction rates were observed in males (56.7%) than female (43.3%).

Table 2: Association of patient's dissatisfaction with socio-demographic variables.

Variables	Satisfied (n=70)	Dissatisfied (n=30)	OR (95% CI)	P-value
Age (years)	63.2 ± 18.9	70.5 ± 20.1	7.3 (-15.85- 1.25)	0.09
Age groups				•
40-50	9 (12.8%)	3 (10.0%)	NA	0.685
■ >50-60	18 (25.7%)	9 (30.0%)		
■ >60-70	30 (42.9%)	15 (50.0%)		
■ >70-80	13 (18.6%)	3 (10.0%)		
Gender	•			
■ Male	36 (51.4%)	17 (56.7%)	1.2 (0.52	0.382
■ Female	34 (48.6%)	13 (43.3%)	- 2.92)	
Marital Status	•			
■ Single	3 (4.3%)	1 (3.3%)	NA	0.077
■ Married	59 (84.3%)	20 (66.7%)		
■ Divorced	8 (11.4%)	9 (30.0%)		
Education level			•	
■ Illiterate	13 (18.6%)	6 (20.0%)	NA	0.215
■ Primary	21 (30.0%)	7 (23.3%)		
■ Secondary School	25 (35.7%)	7 (23.3%)		
University	11 (15.7%)	10 (33.4%)		
Occupation				
■ Housewife	14 (20.0%)	4 (13.3%)	NA	
■ Employed	22 (31.4%)	17 (56.7%)		<0.001*
■ Unemployed	34 (48.6%)	9 (30.0%)		
Income Level				
■ Low	39 (55.7%)	10 (30.0%)	NA	
■ Middle	28 (40.0%)	11 (36.7%)		0.004^{*}
■ High	3 (4.3%)	9 (33.3%)	1	

^{*:} Statistically significant at $p \le 0.05$.

3.3. PSQ-18 score

In our study, the evaluation of patient satisfaction was conducted utilizing the PSQ-18 short form on a five-point Likert scale. This questionnaire was administered to patients during their initial follow-up, and scores were computed for subsequent comparative analysis. The subgroup of time spent with the doctor had the best scoring (4.5 ± 0.59) , followed by communications (4.4 ± 0.44) , interpersonal

manner (4.3 \pm 0.37), financial aspects (4.3 \pm 0.31), technical quality (4.2 \pm 0.22), accessibility (3.9 \pm 0.25) and convenience (3.6 \pm 0.15). The overall satisfaction of patients was (4.0 \pm 0.6). Regarding scales of dissatisfaction, dissatisfied patient had significantly lower mean score in financial aspect, convenience and general satisfaction score (P<0.05).

3.4. Association between sociodemographic data and categories of patient satisfaction

The age and gender showed an association with general satisfaction. Patients in the 60-70-year age range express lower levels of satisfaction than younger patients.

Additionally, compared to female patients, male patients were more likely to be dissatisfied. The high education level showed an association with the technical

quality. In terms of interpersonal manner, we didn't identify any correlations between sociodemographic factors and patients' satisfaction levels. The housewives and unemployed patients were satisfied compared to employed patients in the domain of communication. Regarding financial aspects, the patients with low-income level were satisfied compared to middle-and high income level. Patients over 60 years old report higher levels of satisfaction with their time spent with the

3.5. Causes of dissatisfaction

Postoperative causes of dissatisfaction were explained by residual refractive error, which by itself constituted 43.3% of attributed causes, dysphotopsia (30.0%), ocular surface disorders (16.7%) and posterior segment disorders (10.0%), fig. (1). Negative dysphotopsia was represented

doctor than younger patients. Those who had only high education were less satisfied compared to the patients who had education primary level. Regarding accessibility and convenience, patients who had low education level were to be satisfied compared to patients who had education more than the secondary level. The sociodemographic variable the marital status did not have any significant association with the dimensions of patient satisfaction.

in 2 patients (22.2%) and 7 patients (77.8%) were positive dysphotopsia. The posterior segment disorders were represented as vitreous floaters in 2 patients (66.7%) and cystoid macular edema in one patient (33.3%), fig. (2).

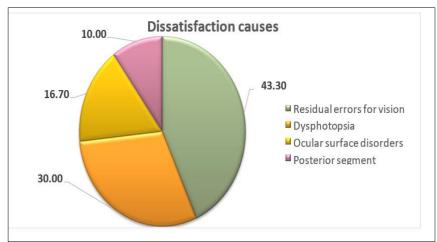


Figure 1: The main technical causes of dissatisfaction.

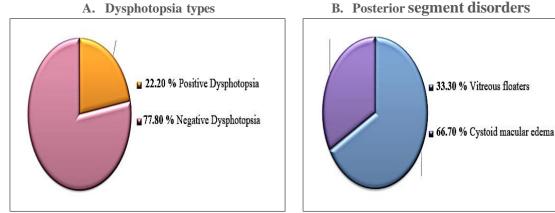


Figure 2: Categorization of A: dysphotopsia; B: posterior segment disorders.

3.6. Dissatisfaction degree

The dissatisfaction degrees were as follow: minimal, annoying and debilitating. The majority of dissatisfied patients were in minimal degree (53.0%), annoying (47.0%) and no one with debilitating dissatisfied degree, fig. (3). Minimal dissatisfaction degrees had resulted from

vitreous floaters, dry eye and positive dysphotopsia. While annoying dissatisfaction degree had resulted from dysphotopsia especially negative, errors of refraction and cystoid macular edema, fig. (4).

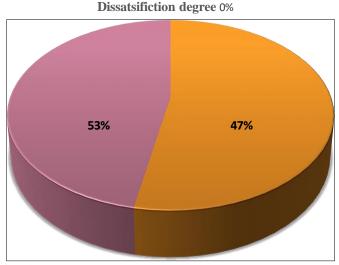


Figure 3: Dissatisfaction degree

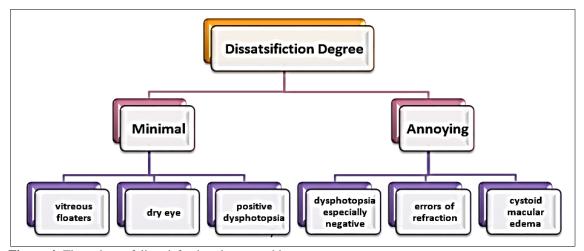


Figure 4: Flow chart of dissatisfaction degree and its causes

4. Discussion

A growing number of studies is focussing on patient satisfaction with healthcare provider services and the elements that affect it. To satisfy the demands and expectations of patients, it is essential to ensure the quality of the services provided [16]. It is our belief that the way various cultures interact to determine overall pleasure makes it impossible to determine overall satisfaction with precision by only calculating the statistical average of a given set of characteristics. This study provided an overview of the satisfaction level after cataract surgery at Ophthalmology Outpatient Clinic of Suez General Hospital. Here, almost 70.0% of

patients were satisfied with the result of cataract surgery, while 30.0% were dissatisfied. Those dissatisfied patients were chosen after two months of surgery for stabilization of surgery to detect the causes of dissatisfaction and its degree. Numerous studies, including ours, demonstrate high levels of patient satisfaction [17,18]. The perceptions of patients of safety may be associated with patient satisfaction, even if some possible causes for this have already been discussed [19]. Interestingly, they proposed that patient satisfaction and safety indicators were inversely related. Further supporting our findings, the 2018 prevalence study found that less than 28.2% of cataract procedures in the US had good surgical outcomes, with just 38% of cases ending in surgery [20]. Nonetheless, prior research from Nigeria and India has indicated that patients are generally satisfied with cataract and eye care services [21,22]. Patient satisfaction was found to be correlated with certain sociodemographic variables. Although not statistically significant, age was found to be the best predictor of patient satisfaction. First, the degree of dissatisfaction among elderly patients was determined by this study. This finding is consistent with a prior study that found that middle-aged and elderly patients may have had lower levels of patient satisfaction, as other studies have shown that patient satisfaction declines with age [23]. In our study, the satisfaction prevalence of female patients was higher than male patients. According to the findings of the current study, more than two-half of them were married. Interestingly, less educated patients in our study were more satisfied as compared with more educated patients, but the difference was not statistically significant. Housewives and unemployed patients had a higher chance of being satisfied with a statically significant difference (P<0.001). The results of this study contradict those of Munawarah et al. [24], who found that patients with higher levels of education were somewhat more likely to be happy. A related study found an association between a client's level of satisfaction and their profession. Patients with more prestigious backgrounds in the workforce were more satisfied overall. The only variable income level is significantly associated with dissatisfaction. Also, the income level significantly associated with patients' dissatisfaction (P=0.004). In our study, we evaluated the patient satisfaction after cataract surgical intervention uneventful phacoemulsification in the single surgical center in Suez using the PSQ-18 short form on a five-point Likert scale. Our study results indicated that the time spent with the doctor had the best scoring (4.5 ± 0.59) , followed by communications (4.4 ± 0.44), interpersonal manner (4.3± 0.37), financial aspects (4.3 ± 0.31) , technical quality (4.2 ± 0.22) , accessibility (3.9 ± 0.25) and convenience (3.6 \pm 0.15). This study finding align with Matsuguma et al., [25] who reported that the financial and interpersonal components had highest satisfaction levels, while accessibility and convenience received the lowest. Furthermore, it was discovered that while the physical environment and financial factors had the least link with overall satisfaction, physician accessibility and technical quality had the strongest. Thus, in similar contexts, managers of health care facilities should prioritise these elements if they want to raise the standard of treatment from the perspective of their patients [25]. Regarding dissatisfaction causes, residual refractive error constituted 43.3%, dysphotopsia (30.0%), ocular surface disorders (16.7%) and posterior segment disorders (10.0%). Negative dysphotopsia was represented in 2 patients (22.2%) and 7 patients (77.8%) were presented with Positive dysphotopsia. The posterior segment disorders was represented as vitreous floaters in 2 patients (66.7%) and cystoid macular edema in one patient (33.3%). Dissatisfied patient had significantly lower mean score in financial aspect, convenience and total satisfaction score. Improvement of visual acuity and cost-effectiveness is most effectively for patients' satisfaction. Objective and subjective measurements of visual outcome may predominate in individual decision making, even though costeffectiveness may be the critical factor in determining the type of operation to be implemented from a public health perspective [26]. The current study found that the convenience and accessibility domains received lower mean scores than the other aspects. This is in contrast to a study conducted by Dole et al., [27]. hat assessed postoperative patient satisfaction and uncorrected distance visual acuity among patients who underwent uneventful phacoemulsification cataract surgery using teleophthalmology and inperson consultation at the hospital outpatient department following an uncomplicated cataract surgery. In the group with complications, the satisfaction score was significantly lower. In our study, the dissatisfaction degrees were presented as minimal, annoying and debilitating. The majority of dissatisfied patients were in minimal degree (53.0%), annoying (47.0%) and no one with debilitating dissatisfied degree. Minimal dissatisfaction degree were resulted from vitreous floaters, dry eye and positive dysphotopsia. While annoying dissatisfaction degree were resulted from dysphotopsia especially negative, errors of refraction and cystoid macular edema.

5. Conclusion

It was discovered that while the physical environment and financial factors had the least link with overall satisfaction, physician accessibility and technical quality had the strongest. Thus, in similar contexts, managers of health care facilities should prioritise these elements if they want to raise the standard of treatment from the perspective of their patients. We should consider unhappiness as a major concern to improve our service provided specially with good pre and postoperative evaluation.

References

- 1. Vision Loss Expert Group of the Global Burden of Disease Study; GBD 2019 Blindness and Vision Impairment Collaborators. Global estimates on the number of people blind or visually impaired by cataract: a meta-analysis from 2000 to 2020 [published correction appears in Eye (Lond). 2024; 38 (11): 2229-2231. *Eye* (*Lond*). 2024; 38 (11): 2156-2172.
- 2. Rossi, T., Romano, M., Iannetta, D., et al. Cataract surgery practice patterns worldwide: A survey. *BMJ Open Ophthalmol*. 2021; 6 (1): e000464.
- **3.** Benítez Martínez, M., Baeza Moyano, D. & González-Lezcano RA. Phacoemulsification: Proposals for improvement in its application. *Healthcare* (*Basel*). 2021; 9 (11), doi: 10.3390/healthcare9111603.

- **4.** Lin, H., Kao, S., Chuang, Y., et al. Comparison of cumulative dispersed energy between conventional phacoemulsification and femtosecond laser-assisted cataract surgery with two different lens fragmentation patterns. *Lasers Med Sci.* 2022; 37 (2): 843-848.
- **5.** Naderi, K., Gormley, J. & O'Brart, D. Cataract surgery and dry eye disease: A review. *Eur J Ophthalmol*. 2020; 30 (5): 840-855.
- **6.** Yotsukura, E., Ayaki, M., Nezu, N. et al. Changes in patient subjective happiness and satisfaction with cataract surgery. *Sci Rep*. 2020; 10, doi: 10. 1038/s41598-020-72846-2
- **7.** Caceres, V. Brand vs. generic ophthalmic medications. *EyeWorld*. 2016.
- 8. Viljanen, A., Koskela, K., Koskela,

- H., etal. One-year results of health-related and vision-related quality of life after clear lens extraction and multifocal intraocular lens implantation. *Am J Ophthalmol*. 2021; 227: 240-244.
- **9.** Kanclerz, P., Hecht, I., Cunha, M., et al. Association of blue light-filtering intraocular lenses with all-cause and traffic accident-related injuries among patients undergoing bilateral cataract surgery in Finland. *JAMA Netw Open*. 2022; 5 (8): e2227232.
- 10. Hecht, I., Kanclerz, P. & Tuuminen, R. Secondary outcomes of lens and cataract surgery: More than just "best-corrected visual acuity". *Prog Retin Eye Res.* 2023; 95: 101150.
- **11.** Basilious, A., Xu, C. & Malvankar-Mehta, M. Dry eye disease and psychiatric disorders: A systematic review and meta-analysis. *Eur J Ophthalmol*. 2022; 32 (4): 1872-1889.
- **12.** Thayaparan, A. & Mahdi, E. The Patient satisfaction questionnaire short form (PSQ-18) as an adaptable, reliable, and validated tool for use in various settings. *Med Educ Online*. 2013; 18, doi: 10.3402/meo.v18i0. 21747
- **13.** Hegazy, N., Farahat, T., Elakkad, A., et al. Validation of the patient-doctor relationship and patient satisfaction questionnaire for an Arabic adult population in an Egyptian sample. *The Egyptian J of Hospital Medicine*, 2021; 83 (1): 1514-1519.
- **14.** Rampat, R. & Gatinel, D. Multifocal and extended depth-of-focus intraocular lenses in 2020. *Ophthalmology*. 2021;128 (11): e164-e185.
- **15.** Donaldson, K. Tips for dealing with unhappy refractive cataract surgery patient. *Curr Ophthalmol Rep.* 2022; 10: 1-4.
- **16.** Ferreira, D., Vieira, I., Pedro, M., et al. Patient satisfaction with healthcare

- services and the techniques used for its assessment: A systematic literature review and a bibliometric analysis. *Healthcare (Basel)*. 2023; 11 (5), doi: 10.3390/healthcare11050639 ·
- **17.** Hoffman, J. & Pelosini, L. Telephone follow-up for cataract surgery: feasibility and patient satisfaction study. *Int J Health Care Qual Assur*. 2016; 29 (4): 407-416.
- **18.** Brooksbank, K., Jenkins, P., Anthony, I., Functional outcome and satisfaction with a "self-care" protocol for the management of mallet finger injuries: A case-series. *J Trauma Manag Outcomes*. 2014; 8 (1), doi: 10.1186/s1 3032-014-0021-y.
- **19.** Tevis, S., Schmocker, R. & Kennedy GD. Can patients reliably identify safe, high quality care?. *J Hosp Adm*. 2014; 3 (5): 150-160.
- **20.** Taryam, M., Rabiu, M., Muhammad, N., et al. Prevalence and causes of blindness and visual impairment; and cataract surgical services in Katsina state of Nigeria. *Br J Ophthalmol*. 2020; 104 (6): 752-756.
- **21.** Ezegwui, I., Okoye, O., Aghaji, A., et al. Patients' satisfaction with eye care services in a Nigerian teaching hospital. *Niger J Clin Pract*. 2014; 17 (5):585-588.
- **22.** Ganguly, E. & Sharma, P. Client satisfaction with quality of health care in a rural area in southern India. *J Public Health Epidemiol*. 2014; 6 (8): 239-245.
- 23. Geberu, D., Biks, G., Gebremedhin, T., et al. Factors of patient satisfaction in adult outpatient departments of private wing and regular services in public hospitals of Addis Ababa, Ethiopia: A comparative cross-sectional study. *BMC Health Serv. Res.* 2019; 19: 1-13.
- **24.** Munawarah, S., Arifin, S. & Febriana, S. Meta-analysis study: Examining the associations between service qu-

- ality, educational level, occupational background, and patient Satisfaction in healthcare facilities. *Riverstudies*. 2023; 1 (2): 104-118.
- 25. Matsuguma, S., Negishi, K., Kawashima, M., et al. Patients' satisfaction and subjective happiness after refractive surgery for myopia. *Patient Prefer Adherence*. 2018; 12: 1901-1906
- 26. Mittal, R., Peter, J., Mani, T., et al.

- Visual outcome and patient satisfaction after cataract surgery: A pragmatic study. *Clinical Epidemiology and Global Health*. 2018; 7 (3): 509-512.
- 27. Dole, K., Pakhale, S., Gandhi, A., et al. comparative clinical study of post-operative care by teleophthalmology and in-person consultation at hospital outpatient department after an uncomplicated cataract surgery. *Oman J Ophthalmol*. 2023; 16 (3): 446-451