# TO ASSESS THE IMPACT OF PROPOSED TEACHING PROGRAMME ON POST-OPERATIVE SELF-CARE AMONG CATARACT PATIENTS

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#### **ABSTRACT**

Cataract is a significant cause of preventable blindness and vision impairment worldwide and is expected to pose a growing obstacle to health care systems as the population ages worldwide due to increased life expectancies. The aim of the study is to assess the effectiveness of post-operative self-care among cataract patients. To assess the existing knowledge regarding post-operative self-care among cataract patients. To assess the effectiveness of a planned teaching program on post-operative self-care among cataract patients. To associate post knowledge score with demographic variables. The study was based on a descriptive evaluative research approach. The population was all post-operative cataract patients. The subject consisted of 60. Study shows that in pre-test 27(45%) of subjects are having poor level of knowledge score, 32(53.33%) were having an average level of knowledge score, 1(6.66%) were having good, were having an excellent level of knowledge 0(0%), knowledge regarding post-operative self-care among cataract patient. And the minimum score is 1, the maximum score is 9, the mean score is 5.07±1.755 and mean percentage is 31.6876%. In post-test 0(0%) of subjects are having poor level of knowledge score, 0(0%) were having an average level of knowledge score, 25(41.66%) were having good, were having an excellent level of knowledge 35(58.33%) knowledge regarding post-operative self-care among cataract patient. And the minimum score is 10, the maximum score is 15, the mean score is 12.87±1.321, and the mean percentage is 80.4375%. The shows that there is a significant difference between pre-test and post-test knowledge scores interpreting effective planned teaching on knowledge regarding post-operative self-care among cataract patients. The mean value of the pre-test is 5.07 and post-test is 12.87 and standard deviation values of the pre-test are 1.755 and the post-test is 1.321. The calculated t-value is 31.754 and the tabulated t- value 2.02 and the p-value is 0.000. the study was concluded that a planned teaching program is an effective method to improve the knowledge among the patients.

**KEYWORDS:** Knowledge, Planned teaching, self-care, postoperative self-care and Cataract.

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# **INTRODUCTION**

A cataract is a major cause of avoidable blindness and visual impairment throughout the world and is likely to present an increasing burden to health care systems as the world's population ages due to increased life expectancy. Identifying risk factors for the development and progression of cataracts is desirable from a public health perspective because, while surgical intervention is an effective modality for restoring vision, there are major obstacles in both the delivery and application of cataract surgical services, especially by the most disadvantaged groups in the population. (1)

The clouding of the crystalline lens of the eye, located at the back of the iris or in its envelope, is known as a cataract. Cataracts are very common in the elderly. Smoking, diabetes, degradation in the lens' nutrition, and deposits of acids and salt between lens fibers are just a few of the causes of cataract and disintegrate of lens fibers, use of alcohol, and prolonged exposure to sunlight. In their 40s and 50s, people develop cataracts as a result of their age. Cataract-related blindness is a

Significant public health problem in developing countries. India accounts for 23% of the 41.8 percent of global blindness, with the majority of cases being affected by cataracts alone. A cataract is responsible for a significant portion of total blindness in India (81 percent) and Haryana (79 percent). Every year, 3.8 million people in India lose their vision due to cataracts. It has a major negative effect on the country's economy and productivity. Women are 1.5 to 2.2 times more likely than men2 to become blind, according to the most recent WHO data on blindness. (2)

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# Aim of the study

The aim of the study is to assess the effectiveness on postoperative self-care among cataract patients.

# **Objectives of the study**

To assess the existing knowledge regarding post-operative self-care among cataract patients.

To assess the effectiveness of a planned teaching program on post-operative self-care among cataract patients.

To associate post knowledge score with demographic variable.

# **Hypothesis**

**H1:** There is a significant difference between pre-test and post-test knowledge scores regarding the effectiveness of planned teaching programs on pre-test and post-operative self-care among cataract patients.

**H2:** There is no significant difference between post-test knowledge scores regarding the effectiveness of planned teaching programs on post-operative self-care among cataract patients.

#### METERIALS AND METHODS

The study was based on descriptive evaluative research approach. The population was all post-operative cataract patients. The subject consisted of 60 post-operative patients in selected Acharya Vinoba Bhave Rural Hospital Wardha in collaboration with Shalinitai Meghe Hospital and Research center Nagpur. the inclusion criteria were post-operative patients or cataract patients who are willing to participate in the study and post-operative patients or cataract patients who are available at the time of data collection. Post-operative patients or cataract patients who can understand and write English or Marathi.

The exclusion criteria were Postoperative patients or cataract patients who have already a attended similar type of study, health personnel, and those having relatives belonging to the health profession Illiterates patients, and the content validity of the tool was done by various experts. The data gathering process began from 9th February to 15<sup>th</sup> February 2019. The investigator visited the selected areas in advance and obtained the necessary permission from the concerned authorities. Based on the objectives and the hypothesis the data were analyzed by using various statistical tests.

# Assessment of the knowledge of subject regarding postoperative self-care among cataract patient planned teaching

This section deals with the assessment of pre-test knowledge scores regarding post-operative self-care among cataract patients. The level of knowledge scores is assessed categorically as poor, average, good, and excellent.

Table 1: Pre-test knowledge scores of subjects regarding post operative self care among cataract patient. n=60

Level of knowledge	Score range	Frequency / percentage	
Poor	0-4 (1-25%)	27(45%)	
Average	5-8(26-50%)	32(53.33%)	
Good	9-12(51-75%)	1(1.67%)	
Excellent	13-16(76-100%)	0(0%)	
Minimum score	1		
Maximum score	9		
Mean score	5.07±1.755		
Mean percentage	31.6875%.	•	

**Table 1 and Figure 1:** The above table shows that in pre-test 45% of patient had poor level of knowledge score, 53.33% of patient had average level of knowledge score, 1.67% of patient had good level of knowledge. The minimum score is 1, maximum score is 9, mean score is  $5.07\pm1.755$ and mean percentage is 31.6876%.

Figure 1: Knowledge score regarding post-operative self-care among cataract patient Post-test.

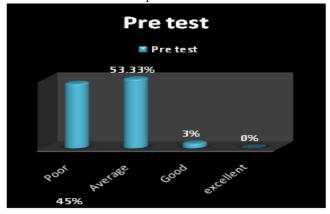
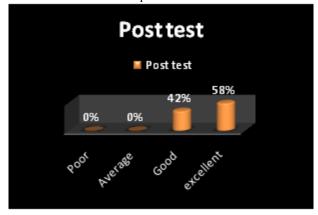


Table 2: Level of knowledge scores of subjects regarding postoperative self-care among cataract patient planned teaching in post

Level of knowledge	Score range	Frequency / percentage	
Poor	0-4 (1-25%)	0(0%)	
Average	5-8(26-50%)	0(0%)	
Good	9-12(51-75%)	25(41.66%)	
Excellent	13-16(76-100%)	35(58.33%)	
Minimum score	10		
Maximum score	15		
Mean score	12.87±1.321		
Mean percentage	80.4375%.	•	

Table 2 and Figure 2: The above table shows that, in post-test 41.66% of patient had good level of knowledge and 58.33% of patient had excellent knowledge regarding post-operative self-care among cataract patient. And the minimum score is 10, maximum score is 15, mean score is 12.87±1.321 and mean percentage is 80.4375%.

Figure 2: Knowledge score regarding post-operative self-care among cataract patient Post-test.

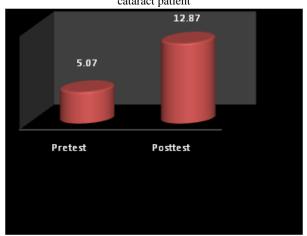


**Table 3:** effectiveness of planned teaching on knowledge regarding post-operative self-care among cataract patient in pre-test and post test

Tests	Mean	score	SD	` /	Degree of Freedom	p-value	Significant
Pre Test	5.07		±1.755	31.754	59	0.000	S, p<0.05
Post Test	12.87		±1.321	31./34	39	0.000	3, p<0.03

Table 3 and Figure 3: The above table shows that there is a significant difference between pre-test and post-test knowledge scores interpreting effective planned teaching on knowledge regarding post-operative self-care among cataract patients. The mean value of pre-test is 5.07 and post-test is 12.87 and standard deviation values of the pre-test are 1.755 and the post-test is 1.321. The calculated t-value is 31.754 and the tabulated t-value 2.02 and the p-value is 0.000. Hence it is statistically interpreted that the planned teaching on knowledge regarding post-operative self-care among cataract patients was effective. Thus the H1 is accepted and H0 is rejected in this study.

**Figure 3:** Percentage wise distribution of Effectiveness of planned teaching on knowledge regarding post operative self care among cataract patient



#### **DISCUSSION**

In the present study significant difference between pre-test and post-test knowledge scores interpreting the effectiveness of planned teaching on knowledge regarding post-operative self-care among cataract patients. According to the result of this study statistically interpreted that planned teaching, the study was conducted on the effect of implementing a teaching program on the knowledge and practice of nurses and clinical outcomes of patient's post-cataract surgery. There was an improvement in nurses' knowledge and practice regarding preoperative teaching program about cataract surgery after implementing a teaching program. (3)

The researcher concludes that the case group of cataract patients have benefited from the implementation of the instructional program, and their knowledge is effectively enhanced and established, also he has considered that the instructional program van is an effective mean for improving the cataract patients knowledge. (4)

The present study shows that in post-test 41.66% of patients had a good level of knowledge and 58.33% of patients had excellent knowledge regarding post-operative self-care among cataract patients. And the minimum score is 10, the maximum score is 15, the mean score is  $12.87\pm1.321$ , and the mean percentage is 80.4375%.

The study on A Descriptive Study to Assess the Knowledge on Post-Operative Self Care among Patients Undergoing Cataract Surgery revealed that a total of 60% (30) respondents have good knowledge, 30%(15) have average knowledge and 10%(5) have poor knowledge. The majority (88%) of the respondents were above 51 years of age. About 56% of the elderly population lacked knowledge about the correct technique of medication instillation, 72% didn't know that reading has no adverse effect on the operated eye and about 80% knew, the eye should be cleaned with boiled and cooled water and cotton swabs. The conclusion of the study revealed that the majority of the patients were elderly and need proper education about various aspects of self-care after cataract surgery. (5)

The study conducted on Effectiveness of Structured Teaching Programme on Knowledge Regarding the Awareness of Cataracts among Old Age People. The finding of the pre-test showed that none of the subjects had adequate knowledge on awareness of cataracts. After the structured teaching program, although they had gained knowledge in all areas of cataract, there is still much more scope for improving their knowledge, especially in the area of causes, signs & symptoms, risk factors, treatment, and prevention of cataract. The paired" test which was computed between pre-test and post-test knowledge scores indicates a true gain in knowledge. Hence it was concluded that a structured teaching programs as an effective method to improve the knowledge among the subjects. (6)

The study conducted which study assesses the knowledge on post-operative self-care activities among patients who have undergone cataract surgery. There is a need for re-enforcement to the patients through education to improve the knowledge on post-operative self-care following cataract surgery. Nurses need to be supportive and educative in caring for these patients.<sup>(7)</sup> Some of the studies on cataracts were reported by Gu et al.<sup>(8)</sup> and Muley et al.<sup>(9-10)</sup> Studies on other eye conditions and needed care were reported.<sup>(11-14)</sup> Studies on different complicated eye surgeries were reported by Diagavaneet al.<sup>(15)</sup> Dhande et al.<sup>(16)</sup> Walvalkaret al.<sup>(17)</sup>, Bele et al.<sup>(18)</sup>. A study on nursing care need was reported by Kurian et al.<sup>(19)</sup>

In the present study, the calculated t-value is 31.754 and the p-value is 0.000, and significant difference between pre-test and post-test knowledge scores interpreting the effectiveness of planned teaching on knowledge regarding post-operative self-care among cataract patients. According to the result of this study statistically interpreted that planned teaching.

## CONCLUSION

The following conclusions were drawn based on the finding of the study. The finding of the pre-test showed that none of the patients had adequate knowledge on awareness of post-operative self-care among cataracts. After the planned teaching program although they had gained knowledge about post-operative self-care. The paired "test which was computed between pre-test and post-test knowledge scores indicates a true gain in knowledge. Hence it was concluded that planned teaching program as an effective method to improve the knowledge among the patients.

# CONFLICT OF INTEREST

Nil

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Nil

#### REFERENCES

- 1. Kansupada KB, Sassani JW, Sushruta: The father of Indian surgery and ophthalmology. Documenta Ophthalmologica: 93;(1-2):159-167.
- 2. National Eye Institute, fact about cataract. National institute of health. 2006.03-201.
- Mariam Ibrahim EI Shafaey, Afaf abdel Aziz Basal, 2018. Effect of implementing teaching program on knowledge and practice of nurses and clinical outcomes of patients post cataract surgery. IOSR Journal of nursing and health science, 7:3.
- Mohammed, Khalida, Flayeh, Majid, 2017. Effectiveness of An Instructional Program on Adult Cataract Patients' Knowledge Concerning Prevent Post-Operative Complications. IOSR Journal of Nursing and Health Science. 6; 5.79-84pp.
- Beth, Mini Rani Mary, 2015. A Study To Assess The Knowledge On Post-Operative Self-Care Activities Among Patients Who Have Undergone Cataract Surgery At A Selected Hospital, Malaysia Journal of Health, Medicine and Nursing 13: 1-9.
- Gu A, Daigavane S, Palsodkar PM, 2019. "Effect of Heparinised Irrigating Solution during Cataract Surgery on Postoperative Inflammation." IJPR; 11, no. 2: 1800– 1803
- Muley S, Saoji C, Daigavane S, 2020. "The Effect of Intracameral Adrenaline Bolus Injection on Pupil Size, Pulse Rate and Blood Pressure during Small Incision Cataract Surgery." IJCRR. 12, no. 14 Special Issue: 114– 18.

- 8. Muley, S., Saoji C., Daigavane S., Patil R., Ghogare A.S., 2020. "Anxiety in Cataract Patients, Benefits of Counseling on Patient Anxiety in Routine Cataract Surgery." IJRPS. 11, no. 2: 2620–25.
- 9. Muley S, Saoji C, Daigavane S., Sadavarte T., 2020. "Case of Corneal Melting with Phthisis Bulbi with Uveal Tissue Prolapse in Left Eye." IJCRR. 12, no. 18: 154–57.
- 10. Sheikh MK., Malavde R, Daigavane S., 2020. "Yogic Eye Exercises Followed by the Ergonomic Advice on Eye Fatigue in Children Attending Online Classes in COVID-19." IJCRR. 12, no. 17: 132–36.
- 11. Bhutada, R.S, 2019. "The Effect of Eye Exercise, Triphala Kwath Eyewash, and Instillation of Distilled Water on Computer Vision Syndrome." JDMIMSU. 14, no. 6: S78–82.
- 12. Dhande, N., Kumar S., Bolane A, 2020. "Assessment of Psychosocial Distress among the Palliative Care Patients in Wardha District of Maharashtra." IJPC. 26, no. 3: 302–5.
- Daigavane, S., Shende V., Prasad M., 2019. "Comparison of Visual Outcomes and Complications of Scleral-Fixated Intraocular Lens and Iris-Claw Lens in Aphakic Patients." JDMIMSU. 14, no. 4: 326–29.
- 14. Dhande, N., Daigavane S., Chitriv Y.U., 2019. "A Comparative Study of Central Corneal Thickness and Endothelial Cell Density after Phacoemulsification by 'Stop and Chop' and 'Divide and Conquer' Technique under Topical Anaesthesia." IJPR. 11, no. 2: 1870–73.
- Walavalkar, R., Lohiya S., Waigi R., 2019. "To Evaluate Macular Changes after Uncomplicated Phacoemulsification by Optical Coherence Tomography." IJPR. 11, no. 2: 1834–39.
- Bele A, Tidake P, Patil PS., 2019. "A Comparative Study of Visual Acuity and Surgically Induced Astigmatism after Phacoemulsification by Temporal Clear Corneal and Superior Clear Corneal Incision." IJPR. 11, no. 4: 2006– 12.
- 17. Kurian B, Anjali L, Pradhnya M, Prashil M, Ashwini M, Pooja N, Patil M, 2020. "A Study to Assess the Perception of Postnatal Mothers Regarding Received Nursing Care." EJMCM. 7, no. 2: 2604–10.

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