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A study to assess the knowledge of patients regarding post cataract surgical care and complications

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Abstract
Cataract is the second commonest cause of blindness after refractive error. Most of the cases are well treated by surgery, which leads to good visual outcome. The basic aim of this study is to assess the awareness and knowledge of patients about post cataract surgical care and complications. Insufficient or inadequate knowledge of patient who underwent for surgery can result numerous complications. Incidence of complications may vary from patient to patient and place to place in different countries. We found that many post-surgical patients have lack of knowledge on eye care and complications. It may depend up on the care of hospital during and after surgery, personal care of patient, regular follow up visits etc. These can leads to significant impact on quality of life and also causes unnecessary increased health care cost resulting in financial constraints to both patients and health care system as a whole. Thus must take action by educating patients continuously to update knowledge on regular follow-up after cataract surgery for preventing further complications and blindness. The finding of the study will be useful in developing more effective education strategies in near future.

Keywords: Cataract, complications, eye care, knowledge of patients

1. Introduction

Cataract occurs when the clear lens of the eye becomes cloudy, leading to gradual loss of vision which can ultimately lead to blindness. Globally blindness affects approximately 45 million people [1, 2]. Cataract visual impairment can have a major negative effect on the quality of older people's lives and can result in difficulties with daily living activities [3]. A Survey conducted by National Eye Survey as reported in National Eye Database year 2009 shows that the prevalence of cataract in the population over 40 years of age was 5.7% [4]. Cataracts cannot be prevented they can be treated by highly cost effective surgery which leads to good visual outcomes [5, 6]. However, evidence from population based surveys indicates that visual acuity outcomes following cataract surgery are not always as good as they might be [7, 8]. The 4th report of National Eye Database (2010) reported that the number of patients for cataract operation is increasing every year. There were 12,798 patients registered in the year 2002 which is increased to 28,506 patients in the year 2010. The mean age for cataract surgery is 64 to 65 years. It is also reported that 42.6% cataract surgeries were done at day care centers in the year 2008, 47.2% in 2009 and 51.5% in 2010.

Over the years, the number of techniques have been evolved in cataract surgery include intra and extra capsular cataract extraction, mini-nuc, phaco-section, sandwich, phaconit, phaco-emulsification etc. The main motto of revolution is to develop safe and successful procedure. The incidence of complications has significantly decreased with better technique and preoperative evaluation. However, some immediate and later complications can occur.

Unfortunately, hospital personnel often inaccurately assess patients' functional status and overestimate patients' knowledge of required self-care activities [9]. Most of the Patients who have undergone surgical procedures have doubts regarding the post-operative self-care activities after returning to their home. The most common concerns were the wound care, pain management, daily activity level, complications, symptom management, elimination, and quality of life.[10] Commonly encountered difficulties in the daily living activities were reading, watching television, cooking, driving and even walking and yet the self-care activities like looking after the incision wound post operatively, eye drop instillation, and monitoring complications and so on [11] Insufficient or inadequate knowledge of patient who underwent for surgery can result numerous complications. Incidence of complications may vary from patient to patient and place to place in different countries. It may depend up on the care of hospital during and after surgery, personal care of patient, regular follow up visits etc. These can leads to significant impact on quality of life and also causes unnecessary increased health care cost resulting in financial constraints to both patients and health care system as a whole. Post Cataract surgical complications can be divided into immediate complications, and delayed or late complications. These complications are expulsive haemorrhage, intraocular haemorrhage, corneal oedema, bullous keratopathy, shallow anterior chamber, iris prolapse, acute postoperative endophthalmitis, delayed chronic postoperative endophthalmitis (onset ranging from 4 weeks to Years), posterior capsular rupture, posterior capsule opacification, damage to IOL, posterior IOL subluxation or dislocation, cystoid macular oedema (may develop months after capsulotomy), raising of intra ocular pressure, dropped nucleus or retained nuclear fragments, suture-induced astigmatism, vitreous loss, vitreous prolapse, retinal detachment etc. Closed angle glaucoma may occur in the immediate postoperative and Secondary open-angle glaucoma may also develop years after the surgery.

Some advices given after surgery to patient include

1. All daily activity other than strenuous athletics may be undertaken.
2. If there are crusts or secretions on the eyelids you may

remove them by wiping gently with a cotton ball or clean wash cloth moistened saline solution.
3. Bath and shower with your eyes closed.
4. Do not allow anything that might carry germs into the eye.
5. Use the sunglasses until light sensitivity subsides.
6. Wear the plastic protective eye shield at bedtime.
7. Avoid any blow to the head or eye.
8. Avoid sleeping on the side of the operated eye or face down.
9. Do not rub or put pressure on the eye.
10. Do not bend the head below your waist.
11. Do not lift heavier weight.
12. Do not strain in any way.

But there is no long time advice for years together. Not many studies have been conducted to assess the knowledge of the patients regarding care for long although it is important. It is required to assess the knowledge of the patients about care and complications to identify the errors and to plan further training to improve their vision.

2. Objective of the study

1. To assess the knowledge of patient regarding care after post cataract surgery.
2. To educate the patient regarding care and complications.

3. Materials and methods

The descriptive approach was used to assess the knowledge regarding post-surgical complications and eye care among the patients who are attending in OPD, A.V. College hospital, Coimbatore, Tamilnadu. The sample size was sixty. Patients were included Male and female, aged between 40 to 70 years, surgery done for uniocular or binocular cataract, has undergone any types of cataract surgery like ICCS, SICS, Paco-emulsification with short duration and long. Patients were excluded patients who are mentally ill, aged above 80 years. In the present study the structured knowledge questionnaire regarding knowledge about complications was adopted to collect the data to assess the knowledge. The structured knowledge questionnaire was designed for the study consists items relating to demographic data of the subjects such as Age, Gender, Education, Religion, Residence, Occupational Status, Marital Status, Family History, Habits and Personal History Including any associated Illness, immediate and late eye care after surgery. Confidentiality of their responses was assured. Written consent obtained from clients who are willing to participate in study.

4. Results and discussion

The demographic profiles of patients, characteristics of patients, knowledge were analyzed and the observations are mentioned below

Distribution of samples according to demographic data

Table 1: Distribution of sample by age group

Age group	Frequency	Percentage
40-50	7	11.6%
50-60	15	25%
60-70	38	63.3%
Total	60	100%

Table 1 shows that Maximum number of 38 (63%) belonged to the age group 60-70 years, 15(25%) belonged to the age group of 50-60 years and minimum 7(11.6%) belonged to the age group of 40-50 years.

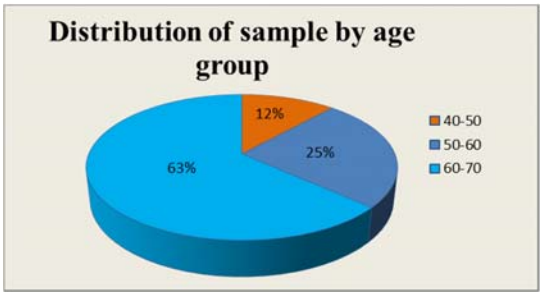

Fig 1: Pie diagram showing distribution of samples by age group

Table 2: Distribution of sample by sex

Sex	Frequency	Percentage
Male	46	76.6%
Female	14	23.3%
Total	60	100%

Table 2 shows that 46(76%) of the samples are male and 14(23%) are females.

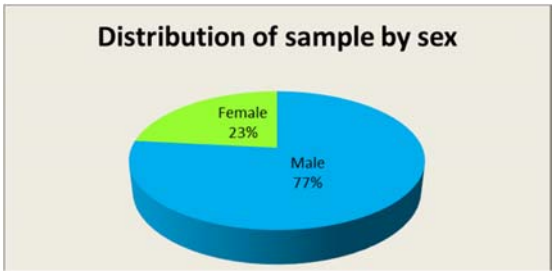

Fig 2: Pie diagram shows distribution of samples by sex

Table 3: Distribution of sample by Occupational Status

Occupational Status	Frequency	Percentage
Government	8	13.3%
Private	14	23.3%
Retired	17	28.3%
Farmer	12	20%
Housewife	9	15%
Total	60	100%

Table 3 shows that 17(28%) of the participants were Retd. employees, 14 (23%) of the participants were private employees, 12 (20%) of the participants were farmers, 9 (15%) of the participants were housewives, 8 (14%) of the participants were Govt. employees.

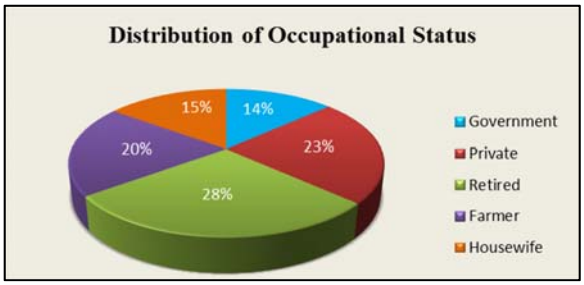

Fig 3: Pie diagram shows distribution of samples by Occupational Status

Table 4: Distribution of sample by having cataract in one eye or two eyes

Cataract	Frequency	Percentage
uniocular	13	21.6%
binocular	47	78.3%
Total	60	100%

Table 4 shows that 47(78%) of the samples were having uniocular cataract, and 13(22%) were having binocular cataract.

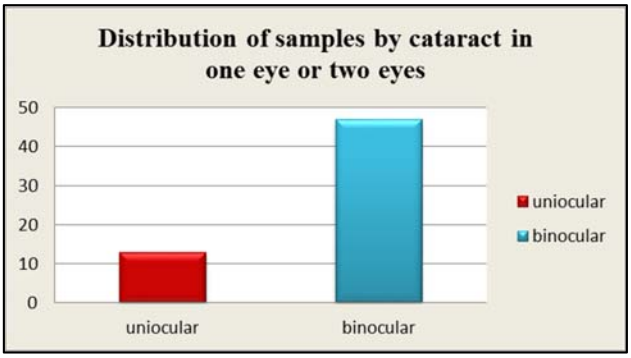

Fig 4: Diagram shows distribution of samples by cataract in one eye or two eyes

Table 5: Distribution of sample who underwent for cataract surgery

Post-surgical	Frequency	Percentage
uniocular	34	56.6%
binocular	26	43.3%
Total	60	100%

Table 5 shows that 34 (57%) of the samples were underwent for uniocular cataract surgery, and 26(43%) were underwent for binocular cataract surgery.

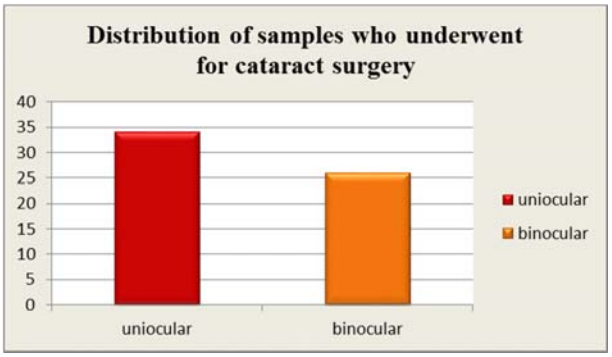

Fig 5: Diagram shows distribution of samples who underwent for cataract surgery

Table 6: Distribution of sample according to level of knowledge

Level of knowledge score	Frequency	Percentage
Adequate knowledge	11	18.3%
Moderately adequate knowledge	22	36.6%
Inadequate knowledge	27	45%
Total	60	100%

Table 6 shows that About 11(18%) of respondents had good knowledge, 22(36.6%) had moderately adequate knowledge, and 27(45%) had poor knowledge about eye care after cataract surgery.

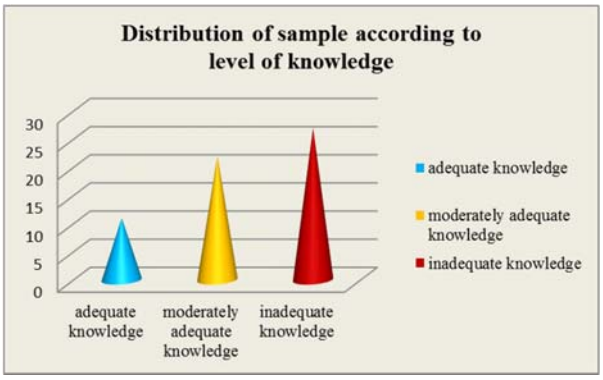

Fig 6: Diagram shows distribution of samples according to level of knowledge

All subjects knew that swimming was not allowed, tap water can be used for cleaning the eyes.

This research shows that, There were 43(72%) of them, who responded that they can use the eye drops according to doctor's advice while 17(28%) responded that it can be used until all medication in the container is over. About 52 (87%) agreed they should not ignore the post-operative signs and symptoms of complications and 5(8%) of them was not sure about It. 3(5%) of them were not respond. The findings in this research, shows that the most of participants did not have adequate knowledge on risk. The limitation is that the sample size for this research was not large enough to generalize the findings. Further research could be conducted among larger population to generalize the findings.

5. Conclusion

The following conclusions were drawn based on the findings of the study. The study reveals that majority 27 (45%) subjects had poor knowledge, 22 (36.6%) subjects had moderately knowledge and 11 (18%) subjects had adequate knowledge. Thus must take action by educating patients continuously to update knowledge on regular follow-up after cataract surgery for preventing further complications and blindness. The finding of the study will be useful in developing more effective education strategies in near future.

6. References

1. Resnikoff S, Donatella Pascolini, Daniel Etya'ale, Ivo Kocur, Ramachandra Pararajasegaram, Gopal P. Pokhare *et al*. Global data on visual impairment in the year 2002. Bull World Health Organ, 2004; 82(11):844-51.
2. Resnikoff S, Donatella Pascolini, Daniel Etya'ale, Ivo Kocur, Ramachandra Pararajasegaram, Gopal P. Pokhare *et al*. Global magnitude of visual impairment caused by uncorrected refractive errors in 2004. Bull World Health Organ, 2008; 86(1):63-70.
3. Polack S. Restoring sight, how cataract surgery improves the lives of older adults. Community Eye Health, 2008; 21(66):22-25.
4. Goh PP, Salowi MA. The 3rd report of the national eye database, 2009. [online] Available: http://www.acrm.org.my/ned/NEDreport/3rdnedReport.pdf.
5. World Bank. Investing in Health. World Development Report 1993 and world development indicators. 1993.

6. Lansingh VC, Carter MJ, Martens M. Global cost effectiveness of cataract surgery. Ophthalmology, 2007; 114(9):1670-8.
7. Bourne R, *et al*. Outcomes of cataract surgery in Pakistan: results from The Pakistan National Blindness and Visual Impairment Surve y. Br J Ophthalmol. 2007; 91(4):420-6.
8. Singh AJ, Garner P, Floyd K, Cost effectiveness of public funded options for cataract surgery in Mysore, India. Lancet, 2000; 355(9199):180-4.
9. Kripalani *et al*. promoting effective transitions of care at hospital discharge: A review of key issues for hospitalists. Journal of Hospital Medicine. 2007; 2(5):314-3
10. Pieper *et al*. Discharge information needs of patient after surgery. Journal of Wound, Ostomy and Continence Nursing. 2006; 33(3):281-290.
11. Mini Rani Mary Beth, Khor Fang Lih, Kumutha A, P Kushalan, 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, ISSN 2422-8419, 2015, 13.