



CATARACT DISEASE;

AWARENESS AND ITS TREATMENT AMONG PATIENT PRESENTING TO OPHTHALMOLOGY OUTDOOR JINNAH HOSPITAL LAHORE

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ABSTRACT... Introduction: Cataract is one of the reversible cause of decreased vision or cataract. Its highest incidence can be seen among senile and diabetics. Patients present in Ophthalmology OPD with the cataract or with one of the complications of cataract. **Objectives:** To study the awareness of cataract disease, knowledge of risk factors and major barriers which result in the delayed presentation. **Study Design:** Cross sectional study. **Setting:** It was conducted in ophthalmology OPD. **Duration:** January 2017 to March 2017 (3 months). **Materials & Methods:** About 100 patients were selected by nonrandom purposive sampling. They were given questionnaires or direct questions were asked to fill the questionnaires. **Results:** 69% were males and 31% were females with age groups ranging from 35 to 95 years of age. Mean age was 60.90 with an SD of 11.28. About 74% of the patients were having a low educational level. For 71% of the patients, ophthalmologist was the source of information about his/her ailment. 57% of the people know about the nature of their disease. Regarding the delay in presentation (36%) presented in less than 3 months after they first noticed blurring of vision. About 20% patient presented after a period of 1 year after feeling of low vision. 59% of patients knew that cataract incidence increases with age. 72% of patients knew that vision can be restored after cataract surgery. Knowledge about the improvement of the eye condition by microsurgery was 66%. Knowledge about the complications of cataract was estimated to decreased vision (61%), blindness (23%), pain (9%), cosmetic problems (2%), others (5%). Reasons for delay include waiting for cataract to mature (53%), financial problems (13%), too far no people to accompany (12%), no time (10%), afraid (6%), don't want to operate (4%), no reason (2%). Knowledge about the risk factors was estimated to be as diabetes (67%), hypertension (23%), others NOS (10%). **Conclusion:** There is a lack of awareness about the cataract disease, its complications and risk factors which result in the late presentation of the cataract patients. Patients, as well as general public, need to be educated by various means to prevent the complications of cataract and blindness.

Key words: Awareness, Cataract, Risk factors, Treatment.

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INTRODUCTION

Blindness or decreased vision in advanced ages is a commonly seen problem. Among various causes of decreased vision cataract is common. In local language, it is called "Safaid Motiya." In the terms of ophthalmology cataract is the pacification of the lens of the eye. There are 30 million blind people in the world and approximately 50% of them are because of cataract.¹ Like other areas of the world, senile cataract is also a common problem and cataract surgery is one of the commonest eye surgeries being performed in

the ophthalmology ward. The age-standardized prevalence of blindness in adults older than 50 remains highest in western sub-Saharan Africa, with a rate of 6.0%. The greatest declines in age-standardized blindness because of cataracts in adults older than 50 between 1990 and 2010 were in East Asia, tropical Latin America, and Western Europe.² Most of the patients with cataract have risk factors for it like smoking, alcohol consumption, sunlight exposure, low education, poor lifestyle habits, including malnutrition and physical inactivity metabolic syndrome, diabetes

mellitus, systemic corticosteroid use and possibly prolonged administration of high doses of inhaled corticosteroids. Patients usually present with a history of progressive decrease in vision. Secondary glaucomas because of hypermature cataracts can also be seen. Treatment of cataract is by the modern microsurgical technique which allows intervention for cataract before it has resulted in blindness; normal vision typically is restored with intraocular lens implantation.³ There are no proven therapies by which cataract formation can be slowed down. However, there are a few observational studies which suggest that using healthy diet, avoiding smoking, a diet rich in lutein and zeaxanthin and postmenopausal estrogen use may prevent or reduce the risk of developing cataracts.^{4,5}

Different studies have been performed in different areas of the world to assess the level of awareness about cataract, their willingness to pay for the cataract surgery.^{6,7,8} In a Korean study low awareness about the cataract, disease was found.⁹ A similar study was conducted in Latin America. Results showed a lack of awareness of cataract as one of the problems of the barriers of cataract.¹⁰ A study conducted in Hong Kong found the similar results.¹¹ A study on Chinese rural population showed the cost to be one of the barriers of cataract surgery.¹² Similar studies have been conducted in India, Nigeria and other areas to assess the level of awareness.^{13,14}

In western population, health education programs and surveys are done. Well designed community educational programs can have a great impact on the society.¹⁵

In Pakistan, there is a lack of awareness and multiple barriers for cataract patients to get optimal treatment. Local hakeems, myths, financial problems, socioeconomic problems and family problems prevent patients from seeking advice at early stages of cataract. Poverty is a big issue in Pakistan like other countries of the World.

The aim of our study is to find out the major areas where patients lack awareness about the cataract disease, its risk factors, and common

myths about its treatment which can be improved by patient education. This study will also help us to identify major barriers which prevent cataract patients from seeking medical advice. These efforts may prevent cataract complications and blindness. The scope of our study will be to help the poor and uneducated people to give them an insight about the cataract which is curable by microsurgical techniques.

MATERIALS & METHODS

This study was conducted in the ophthalmology outdoor department of Jinnah Hospital. 100 patients were included in the study which was selected by nonprobability consecutive sampling. It was a cross-sectional study. Patients coming to Jinnah Hospital Lahore for consultation of Cataract were asked an already designed questionnaire regarding their knowledge of the disease, barriers to seek advice from the hospital and also about its various treatment options available. Patients who can read or write were given the forms whereas most of the forms were filled by asking them direct questions according to the questionnaire. Data was collected from January 2017 to March 2017. Our questionnaire included 13 questions in judging the basic knowledge and myths of the cataract patients. This questionnaire also focused on identification of reasons for delayed presentation of cataract patients. The questionnaire was formatted in the Urdu language so that anyone can fill it by him/herself. Questionnaires of those patients who could not read or write were filled by the duty doctor or staff. Data from the questionnaire was entered in SPSS v 18 for further analysis.

RESULTS

In our study, about 100 patients were included. 69% were males and 31% were females. They belong to different age groups ranging from 35 to 95 years of age. A maximum number of patients were of 50-70 years of age group. Mean age was 60.90 with an SD of 11.28. About 74% of the patients were having low educational level either illiterate (34%) or primary education (39%) only. 48 % of the people belong to the city while others belong to town (22%) or village (30%). About 71% of the patients were unaware of the nature of their

ailment and ophthalmologist was the source of the information about his/her ailment.

Most of the patients knew that the problem of their eye has been the pacification of the lens (57%). Some (19%) knew to the extent that it was some other problem which has resulted in the damage to the lens of the eye. Regarding the delay in presentation of the cataract patient; Mixed results have been seen. Some patients (36%) presented in less than 3 months after they first noticed blurring of vision. Rest of the patients have presented after 3 months. About 20% patient presented after a period of 1 year after they first time detected decreased vision. Most of the patients (59%) knew that cataract incidence increases with age. Very few patients did not know that cataract have been a curable disease. Most of the patients (72%) knew that vision can be restored after cataract surgery. In our study knowledge about the improvement of the eye condition by microsurgery was 66%. Knowledge about the complications of cataract was estimated to be negligible among the patients. 61 % of the patients knew it to the extent that cataract causes decreased vision. While the knowledge of other complications was estimated to be as followings: blindness (23%), pain (9%), cosmetic problems (2%), others (5%). A detail of important variables of the questioner is shown in Table-I.

In our study, the most common reason for the delay of presentation to the doctor has been the ability to see through the affected eye in the presence of cataract; in other words, patients have been waiting for the cataract to mature.

This reason was estimated to be 60%. Patients were also asked about the knowledge of the risk factors of cataract.

In our study, the knowledge about the risk factors of cataract was assessed. 67% of the studied population was diabetic. They almost all knew that diabetes might be a possible cause of their cataract. Others who were smokers or with other risk factors were unable to comment about the association of these two conditions with cataract as well. All most all people knew that cataract was

due to senility. The knowledge about the other possible risk factors like alcohol, malnutrition and sedentary lifestyle was zero percent.

Education Level Of Patients			
	Educational Level of Patients	Frequency	Percent
1	Illiterate	35	35
2	Up to 5 (Primary Education)	39	39
3	Up to 12 th standard (Intermediate)	16	16
4	Higher education (college/ university)	10	10
	Total	100	100
Source of Information About Cataract			
1	Ophthalmologist	71	71
2	Family member	5	5
3	General practitioner	3	3
4	Optometrist	7	7
5	Medical staff	8	8
6	Media	6	6
7	Total	100	100
Time to Realize That Vision Was Not Good			
1	Less than 3 months	36	36
2	3 to 6 months	19	19
3	6 to 9 months	18	18
4	9 months to 1 year	7	7
5	More than 1 year	20	20
6	Total	100	100
Awareness About Worse Effect Of Cataract			
1	Low vision	61	61
2	Blindness	23	23
2	Pain	9	9
4	Cosmetic problems	2	2
5	Others	5	5
6	Total	100	100
Time To Realize That Eye Disease Can Be Treated			
1	less than 3 months	66	66
2	3 to 6 months	15	15
3	6 to 9 months	9	9
4	9 months to 1 year	9	9
5	more than 1 year	1	1
6	Total	100	100

Table-I. List of variables studied in our study

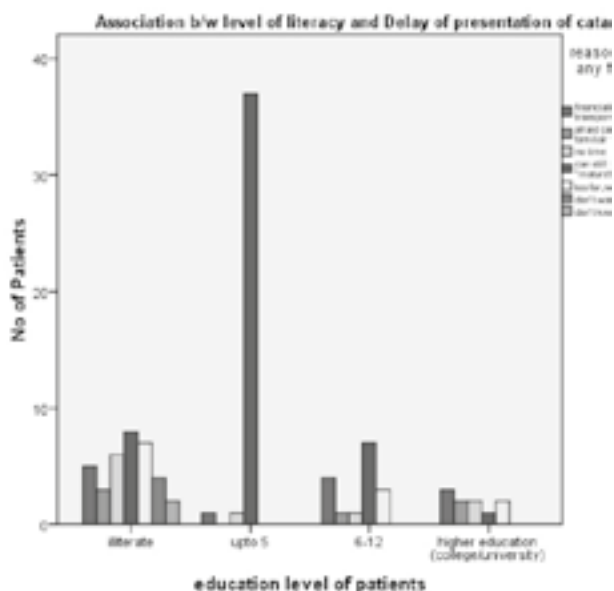


Figure-1. Association between level of education and Delay of Presentation of Cataract Patients

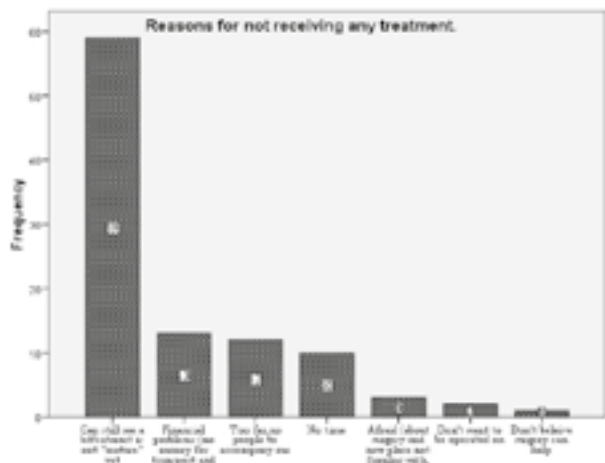


Figure-2. Reasons for Not Receiving the Treatment

We also studied the association of level of literacy and the reasons for delay of cataract patients. In our study waiting for the cataract to mature before its presentation was seen all groups but it was predominant reason among the illiterate and patients with lower educational status (primary or matric).

DISCUSSION

Cataract is one of the preventable cause of blindness worldwide. Its incidence can be seen in almost all areas of the world. In our population

cataract is commonly seen in diabetics and IN senile patients. Like other populations, we also had a bit higher incidence of cataract in males as compared to females.

Awareness about the cataract among our patients was found to be adequate in many areas. The main source of information has been an ophthalmologist. Most of the patients despite knowing that cataract is a treatable by microsurgical techniques did not opt for surgery. This is because of either fear of surgery, financial reasons or waiting for the cataract to become mature as is evident in our study. The last reason was commonest among the patients and because of this patients come up with hypermature cataract or the complications of the cataract which may result in permanent loss of vision. So the patients of cataract should be educated and encouraged to pursue surgery as to prevent its complications.

Financial problems have not been found to be significant because the surgery for the cataract in Pakistan cost only 30-60 US dollar in Government sector hospitals. This is the cost which is easily managed by the patient’s family or other local NGOs.

The knowledge about the risk factors of cataract was also poor. Possible reasons are the lack of educational programs, illiteracy, poverty and lack of healthcare facilities. This is the area which also needs to be addressed. Most of the patients were either senile or were diabetics with uncontrolled diabetes and hypertension. Improving control of their diabetes and hypertension might delay the formation or progression of the cataract. Stressing upon the eye care in these patients may render early detection of eye diseases in these patients.

CONCLUSION & RECOMMENDATIONS

There is a lack of awareness about the cataract disease, its complications and risk factors which result in the late presentation of the cataract patients. Patients, as well as general public, need to be educated by electronic media, paper, the internet, general public lectures and awareness camps.


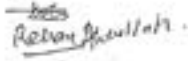
Regular eye checks up on 6 monthly or annual basis in diabetics or senile patients should also be done for detection of cataract and other eye complications of the disease among patients while continuing to stress upon the tight control of the predisposing diseases like diabetes & hypertension. These efforts not only would reduce the complications of cataract but also would decrease blindness.

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