# A record based profile of cataract patients at tertiary medical college and hospital, Chengalpattu

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# **Abstract**

**Introduction:** Globally, cataract has remained the major cause of blindness over the years. World Health Organization (WHO) reveals that 47.8% of global blindness is due to cataract. In India, cataract is the common cause of blindness accounting for 62.6% cases of blindness. The prevalence of cataract in Tamil Nadu above 50 years of age was found to be 48%. **Objectives:** To determine the socio demographic profile and the type of cataract among the cataract patients attending ophthalmology department in Tertiary care centre. **Materials and Methods:** A record based cross sectional study was conducted among outpatient Department of Ophthalmology in Chengalpattu Medical College. Systematic sampling was done and 100 cataract patients were selected from total of 337 patients. Details regarding Socio demographic profile and type of cataract were collected from the records. **Results:** Mean age was 60.16 years with standard deviation of 20.05 years.63% were females. 85% were daily laborers and 56% were illiterates. Majority of them were from low socio economic status. Except mature and immature cataract, there were no major differences in the other types of cataract. **Conclusion:** To deal with such a major problem of curable blindness it is necessary to know its magnitude where health resources are scarce in order to mobilize the resources and it is important to know about the knowledge of epidemiological factors associated with cataract

**Key Words:** Cataract, Chengalpattu, Tertiary care centre.

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Received Date: 23/11/2016 Revised Date: 14/12/2016 Accepted Date: 02/01/2017



## INTRODUCTION

A cataract is a opacity in the normally transparent crystalline lens of the eye. This opacity can cause a decrease in vision and may lead to eventual blindness. The prevalence of cataract increases with age, although it often occurs earlier in life, and there is more of it. Globally, cataract has remained the major cause of blindness over the years. World Health Organization (WHO) reveals that 47.8% of global blindness is due to

cataract. In South Asia region which includes India, 51% of blindness is due to cataract. [2] Vision 2020 is the goal to eliminate avoidable blindness. India is one of the signatory of Vision 2020.3 Blindness especially due to cataract, poses a major challenge to all developing countries in the world. In India, cataract is the common cause of blindness accounting for 62.6% cases of blindness.<sup>4</sup> In India, as one of the biggest developing countries, had more number of blind persons requiring vision restoring cataract surgery. According to a recent survey in the Rapid Assessment of Avoidable Blindness (RAAB) study, cataract was responsible for 77.5% of avoidableblindness.<sup>5</sup> The prevalence of cataract shows a steep rise ranging from 0.5% above 30 years to 94.5% above 70 years of age. In a study to estimate the prevalence of blindness and its causes among those aged 50 years and above, bilateral cataract was found to be the principal cause (78.7%) in 2007. In Tamil Nadu, the estimated prevalence of cataract was 7.3 per 1000 population and 127,514 new cases of cataract are added to the burden each year.<sup>6</sup> The prevalence of cataract

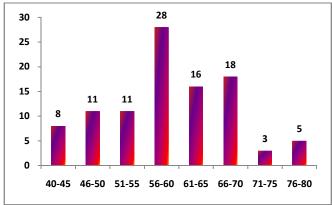
clearly shows a steep rise ranging from 0.5% above 30 years to 94.5% above 70 years of age. As per the National Program for Prevention and Control of Blindness (NPCB) survey (2001-02) the prevalence of cataract in Tamil Nadu above 50 years of age was found to be 48 %. The major barriers for accessing health care services revealed a changing trend from attitudinal to service delivery based reasons in a comparative study with a decade gap. Attitudinal barriers like could manage daily work, female gender, old age, no one to accompany, cataract not mature enough, fear of surgery, fear of surgery causing blindness, were reported than accessibility or cost. <sup>10</sup> To deal with such a major problem of curable blindness it is necessary to know its magnitude where health resources are scarce in order to mobilize the resources and it is important to know about the knowledge of epidemiological factors associated with cataract. Knowledge regarding magnitude and socio demographic factors will be helpful for healthcare managers. Therefore, the present study was conducted among the patients in ophthalmology department of a tertiary health center to study the prevalence, socio demographic profile, and trend of causes of cataract.

### MATERIALS AND METHODS

The study was conducted among 100 cataract patients attending Ophthalmology department as out patients in Chengalpattu Medical College and Hospital. It is a record based study choosing cataract patients from the records maintained in the Department of Ophthalmology Chengalpattu medical college and hospital. Systematic sampling method was adopted to choose 100 cataract patients from the list of 337 patients. Patients with insufficient data were excluded. It is a onetime study and there is no follow up. Daily outpatient cases were screened for cataract and their socio demographic were collected. After collecting the data, they were subjected to ophthalmology examination of both eyes to find out the type of cataract socio demographic variables such as age, sex, education and occupation were collected. Regarding education, the definition of effective literacy rate adopted by the census was used and regarding occupation, the exact occupation the patient carried out as on then was taken.

#### RESULTS

The records of 100 cataract patients were collected from ophthalmology department. Mean age was 60.16 years with standard deviation of 20.05 years. 28% of patients were in the age group of 56-60 years and nearly 70 % of the patients were above 55 years of age (Fig-1).



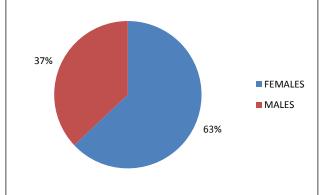
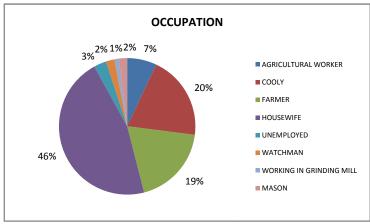


Figure 1: Figure 2:



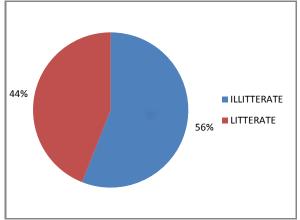
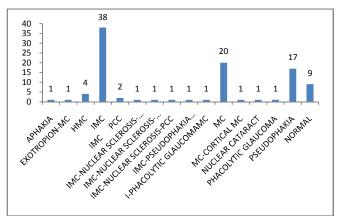
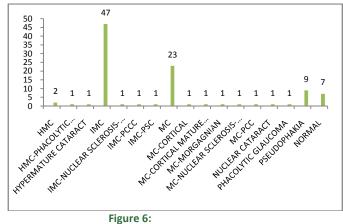


Figure 3: Figure 4:







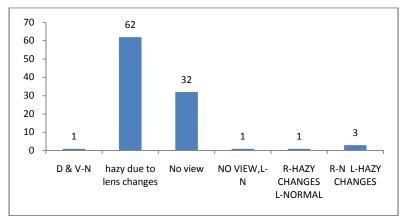


Figure 7:

- Figure 1: The age group of 56-60 years and nearly 70 % of the patients were above 55 years of age (Fig-1).
- Figure 2: Females constituted 63 (63%) were and males around 37 (37%)
- Figure 3: Shows Out of the 100 patients revealed 85 % of the patients were daily laborers (combining both male and female)
- Figure 4: Among 100 cataract patients, only 44 % found to be literates.
- Figure 5: Most common cataract in right eye was immature cataract (38 %) followed by mature cataract (20%) and pseudophakia (17%), normal eye (9%) and the remaining were negligible.
- Figure 6: Most common cataract in left eye was immature cataract (47%) followed by mature cataract (23%) and pseudophakia (9%), 7 % had normal eye and remaining were negligible.
- Figure 7: Shows the lens changes among cataract patients

#### DISCUSSION

Though the prevalence of cataract and blindness takes a definite steep rise from subjects above 50 years of age, it tends to occurs even among younger age groups (8% of the patients were in the age group of 40-45). Arthi et al study showed the youngest age group as 50 years<sup>11</sup>. Females were more affected compared to males with the ratio of 1:1.9. The occupational status of the study participants clearly shows patients who belong to low socioeconomic status seek health care from Government hospitals. 56% were illiterates among the 100 patients indicating mostly illiterates attend Government hospitals for cataract surgeries. Out of 17 pseudophakia in the right eye, 11 had immature cataract and 1 had mature cataract in the left eye, one had hypermature cataract, one patient had phacolytic glaucoma in both eyes. Occurrence of immature cataract was slightly higher (47%) in left eyes compared to right eyes (38%). Except mature and immature cataract, there were no major differences in the other types of cataract.

## **CONCLUSION**

Cataract is major problem affecting the geriatric age group. Out of the 100 cataract patients 70% were above 55 years and out of these 63% were females. 56% of the patients were illiterate and majority of them belong to low socio economic status. Both the eyes were equally affected which slight increase in immature cataract in left eye. As such cataract is a major concern in geriatric age group where majority of them seek medical assistance from tertiary care setup. If proper screening programs and camps are implemented in the periphery the burden in tertiary care centre can be reduced.

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Source of Support: None Declared Conflict of Interest: None Declared