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Original Research Article

The study of demographic profile of patients of senile mature cataract attending the eye OPD of GMC Jammu, India

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ABSTRACT

Background: Age related cataract also called as senile cataract is the commonest type of acquired cataract affecting people over the age of 50 years. In developing countries like India, many times patients with cataract report to the hospitals very late, when it has become mature. Keeping this in mind this study was undertaken to study the demographic profile of patients of senile mature cataract attending the OPD of GMC Jammu and to see if there is correlation between demographic factors and time of seeking medical attention.
Methods: This study was conducted on 41 patients of senile mature cataract who attended OPD of GMC Jammu from August 2019 to November 2019. All patients were subjected to detailed history taking and ocular examination. Socio-economic status and education level of all patients was assessed. All patients were admitted and underwent cataract surgery with IOL implantation.
Results: In study the mean age of patients was 62.46 years with 58.53% patients being females. Majority of patients were from rural background with low socio-economic status and low education levels.
Conclusions: From this study we concluded that female sex, low socio-economic status, comorbidities and lower literacy levels are associated with patients seeking medical attention for cataract at an advanced stage.

Keywords: Cataract surgery, Demographic profile, Senile mature cataract

INTRODUCTION

Cataract is clouding of lens which prevents clear vision. Cataract accounts for 39% of the worldwide blindness.[1] Due to population growth and increased longevity there is rise in the number of cataract patients in the world.[2] In India cataract is the principal cause of blindness accounting for 62.6% cases.[3] Age related cataract also called as senile cataract is the commonest type of cataract affecting people over the age of 50 years. Morphologically senile cataracts may be cortical or nuclear. Age, sex, hereditary, UV radiations, dietary factors, etc are the risk factors responsible for maturation of senile cataract from the stage of immaturity to maturity. When lens becomes completely opaque, it becomes a senile mature cataract with a pearly white colour. Cataract extraction with intraocular lens implantation is the only surgical approach for cataract.[4] In developed world people seek medical aid for cataract at a very early stage. In developing countries like India, many times patients with cataract report to the hospitals very late especially those from rural background either due to lack of facilities or lack of awareness. In view of these facts this study was undertaken to study the demographic profile of patients of senile mature cataract attending the OPD of GMC Jammu.

Aims

- To study age, gender, socio-economic status and education level of patients of senile mature cataract attending the OPD of GMC Jammu.

- To see if there is correlation between demographic factors and time when patients of cataract seek medical attention.

METHODS

This was a prospective hospital based observational study. The study included 41 patients of senile mature cataract who attended the OPD of GMC Jammu from August 2019 to November 2019. After taking a written and informed consent from the patient, all patients were subjected to detailed history taking and ocular examination which included VA assessment, slit lamp examination and IOP measurement. As fundus examination was not possible due to total lenticular opacity, usg b-scan was done for gross assessment of posterior segment. Socio-economic status was determined using Udai Pareek Revised Scale (rural patients) and Kuppuswamy scale (urban patients).[5,6] Education level of patients was assessed and they were divided into 3 groups namely no formal schooling, under matriculate and matriculate and above. All the patients were admitted and underwent cataract surgery with IOL implantation in GMC Jammu. The data was entered in Microsoft excel and subsequently analysed with mean and percentage.

Inclusion criteria

- Age 50 years or more
- Patients of senile mature cataract

Exclusion criteria

- Age less than 50 years
- Patients with immature cataract
- Patients of ch. glaucoma or those with posterior segment pathologies like retinal detachment

RESULTS

In study the mean age of the patients was 62.4 years. 41.40% patients belonged to the age group of 50 - 60 years followed by 61 - 70 year age group (39.02%). Only 4.87% patients were more than 80 years of age (Table 1).

Table 1: Age group of patients.

Age (years)	No. of patients (N=41)	Percentage (%)
50-60	17	41.40
61-70	16	39.02
71-80	6	14.63
>80	2	4.87

Table 2: Residence of patients.

Area	No. of patients (N=41)	Percentage(%)
Rural	32	78.04
Urban	9	21.95

The male to female ratio was 1:1.4 with 58.53% of the patients being females (Figure 1). 78.04% were from rural background. Out of 41 patients only 9 (21.95%) patients resided in urban areas (Table 2). 41.4% patients had no formal schooling. 34.1% were under matriculate and only 23.9% had studied till or beyond matriculation (Table 3). In the rural population most patients (49.37%) fell in lower middle class and lower class category.[5] 55.55% patients living in urban areas fell in lower category.[6] Thus, in both rural and urban areas, it was the patients belonging to lower socio-economic group that sought treatment for the cataract at a very late stage.

Table 3: Education level of patients.

Education	No. of patients (n=41)	Percentage (%)
No formal schooling	17	41.4
Under matriculate	14	34.1
Matriculate and above	10	23.9

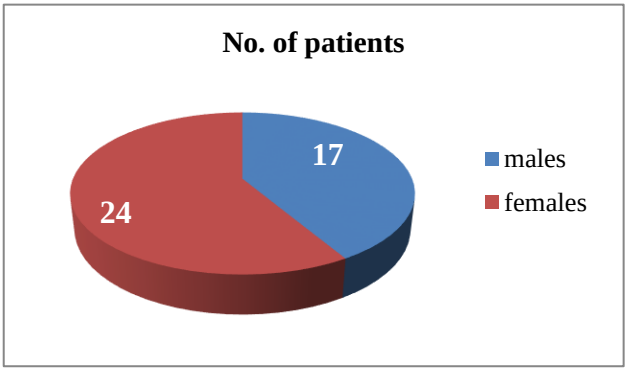

Figure 1: Gender distribution of patients.

DISCUSSION

In study the maximum prevalence of senile mature cataract was seen in the age group of 50 - 60 years. This was closely followed by the age group of 61 - 70 years. This is similar to the observation made by Shori et al in their study where 37% of the patients fell in 50 - 60 year age group.[4] The prevalence of mature cataract was low in males as compared to females. Nirmalan PK et al also reported lower number of cataract in males.[7] However, Seah SK et al observed that prevalence was similar for males and females.[8] Increased incidence of senile mature cataract in females can be attributed to multiple factors like lower nutritional status, confinement to household chores which mostly requires near vision and cultural insensitivity to a female's health needs. Attitudinal barriers like "could manage daily work", "fear of surgery" and "no one to accompany" are also more commonly seen with females.[9] In present study it was observed that a low socio-economic status and low education levels were also associated with patients reporting to the hospital at an advanced stage of cataract.

This is similar to the observations made by Krishnaiah S et al in their study.[10] As 78.04% of the patients belonged to the rural areas, it can be said that there is lack of awareness regarding surgical treatment of cataract in far flung areas. Health care facilities need a lot of improvement in remote areas. Low education levels also contribute to increased prevalence of senile mature cataract. This correlates with findings of Avachat SS et al.[3]

In present study there were two patients who were fully aware of their visual status and need to get their cataract operated but couldn't get operated at earlier stage as they were diabetic with poor glycemic control with frequent hospitalizations. This suggests that debilitating comorbidities also play a role in patients not getting their cataracts operated timely as they are engrossed with more life threatening issues.

CONCLUSION

With this study, it was concluded that female sex, low socio-economic status, low education levels and associated comorbidities play an important role in patients seeking treatment for cataract surgery at an advanced stage. Lack of facilities in rural areas along with low awareness levels is also a contributing factor.

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Ethical approval: The study was approved by the Institutional Ethics Committee

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