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Research Article

**DEMOGRAPHY OF THE CATARACT PATIENTS VISITING  
THE OUTDOOR PATIENT DEPARTMENT OF JINNAH  
HOSPITAL, LAHORE****Dr. Humna Mehboob, Dr. Hunza Malik, Dr. Rafiyya Ali Athar**  
Allama Iqbal Medical College**Abstract:**

**Background:** Cataract is one of the most common diseases of the eye occurring worldwide. It affects both eyes in a majority of the cases. There is clouding/haziness of the lens fibers. It is the leading cause of blindness. Various researches have been conducted worldwide in the past on the Demographic Variables of the Cataract patients visiting different hospitals. Similarly, a massive turnover of such patients is seen in the Jinnah Hospital, Lahore and there was no research conducted previously on the demography of the disease in our region (Pakistan), that is why we were assigned research on this topic.

**Objective:** The Objective of this study was to study the demographic details of the Cataract Patients coming to the Outdoor Patient Department of Jinnah Hospital Lahore.

**Material and Methods:**

**Study Design:** Cross-sectional study

**Study Setting and Duration:** The research was carried out in Jinnah Hospital Lahore. The duration of the study was four months from 1st April to 31st July 2014.

**Inclusion Criteria:** Patients coming to the outdoor department of Jinnah Hospital Lahore suffering from Cataract of any age and either gender.

**Sample size:** 300 patients included in our study through a non-probability convenience sampling.

**Data Collection and Analysis:** The patients who agreed to participate were asked to sign informed consent. A self-designed questionnaire consisting of open and closed end questions was provided to each participant. The questionnaire contained demographic related items such as age, gender, address, religion, ethnicity and employment history of father and mother. The patients were guided how to fill the questionnaire and assured that their response would be treated with utmost confidentiality.

**Results:** A total of 300 patients were enrolled into the study. It was seen that 27.3% of the patients belonged to age group 31-50 years and 4.3% of the patients belonged to age group 11-20 years. Most of them were Males (71.7%). Most of the patients were Married (79.33%). Majority belonged to Urban area (61.3%). Most of the cases had bilateral involvement of the eyes (64.3%). People working as Govt./Private Employees were most commonly affected (39.3%) and it was least common in businessmen (5%).

**Conclusions:** Research showed that Cataract mostly affects Married Males aged Avg. 31-50 years residing in Urban areas working as Govt. or Private Employees with both eyes mostly involved.

**Key Words:** Cataract Incidence, Public awareness, Demography, Treatment, and Prognosis.

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**INTRODUCTION:**

Cataract is the clouding of the lens inside the eye which leads to a decrease in vision. Blindness is the most common outcome of cataract and it can be treated with surgery. Due to opacification of the lens, light is unable to get focused on to the retina and thus the visual loss occurs. Ocular trauma is the leading cause of the unilateral blindness [2].

Ocular Trauma to the eye causes Traumatic Cataract in the eye usually in adults and children. Incidence of Cataract at the age of 80 years is almost 100% and by the age of 60 years it is 50% [4]. Surgery is performed to correct cataract because it is usually safe and effective form of treatment with fewer side effects [5].

A major cause of blindness in Asia is Cataract. In India almost 9 million people affected by Cataract are blind.6

Cataract is one of the most frequently occurring disease which causes visual impairment among other ocular diseases in the world [7]. Elderly people commonly affected suffer gradual painless vision loss [8]. Demographic shift of Cataract has occurred to the developing countries and hence increased the overall incidence of Cataract. Cataract Surgery is performed mainly to correct this ailment with the objectives to improve as many aspects of vision as possible. These include contrast sensitivity, disability glare, and visual fields. The objective is not just to improve functional vision but also help improving performance in daily activities [9,10].

Cataract is an extremely common disease of vision related to the aging [11]. The number of drivers having Cataract is thus projected to increase greatly in next few decades as population of elderly is increasing and older people also retain driving license longer now [12]. Cataract dramatically affects the driving ability as it negatively affects many aspects of the vision including visual acuity, contrast sensitivity, stereopsis etc [13].

Cataract accounts for half of the cases of blindness in low-income countries. And it has a major impact on poverty in those countries as well.14,15 Cataract Surgical Rate is defined as a number of Cataract operations/million population/year. It is an internationally recognized standard measure for Cataract

Surgery service activity. It also indicates availability

and acceptability of Cataract Surgery to the general population [16,17].

Strong evidence exists and suggests that Cataract Surgery significantly improves the Visual Related Quality of Life (VRQOL) [18-20]. However most of the research regarding such Cataract Surgeries has been done in developed countries where there is less severe visual impairment before surgery and social circumstances differ considerable [21].

**OBJECTIVES:** The Objective of this study was to study the demographic details of the Cataract Patients coming to the Outdoor Patient Department of Jinnah Hospital Lahore.

**OPERATIONAL DEFINITION:** Cataract was defined as clouding of the lens inside the eye on examination which leads to a decrease in the vision thus causing blindness and is conventionally treated with surgery.

**MATERIAL AND METHODS:**

A Cross-sectional study was conducted at Eye OPD in Jinnah Hospital Lahore from 1st April to 31st July 2014. A non-probability sampling comprised of 300 Cataract Patients of both gender and age were included in our study. The patients who agreed to participate were asked to sign informed consent. A self-designed questionnaire consisting of open and closed end questions was provided to each participant. The questionnaire contained demographic related items such as age, gender, address, religion, ethnicity and employment history of father and mother. The patients were guided how to fill the questionnaire and assured that their response would be treated with utmost confidentiality. Data was entered and analyzed in SPSS Software (Ver. 17.0). Mean and the standard deviation were calculated for numerical variables like age. Results were recorded as frequencies, percentages, means and standard deviations.

**RESULTS:**

A total of 300 patients were enrolled into the study. It was seen that 27.3% of the patients belonged to age group 31-50 years and 4.3% of the patients belonged to age group 11-20 years. Most of them were Males (71.7%). Most of the patients were Married (79.33%). Majority belonged to Urban area (61.3%). Most of the cases had bilateral involvement of the eyes (64.3%). People working as Govt./Private Employees were most commonly affected (39.3%) and it was least common in businessmen (5%).

**DISCUSSION:**

The study included 300 cataract patients visiting the Jinnah Hospital OPD. Cataract seemed to be most prevalent in 41-50 age groups. Cataract is the most common disease of eye affecting elderly people worldwide. Age is one of the most important risk factors. Another important risk factor is sex with the person. Males were more commonly affected (71.7%). Results also showed that it is more prevalent among the married people (79.33%). Most Patients visiting JHL with Cataract were working as Govt./Private employees (39.3%). A study conducted by Borazan Mehmet and Gunduz Abuzar stated that elderly males were more commonly affected by Cataract. This result is same as our finding. However in the case of the study mentioned males predominated by only 1.2%. This is in contrast to our result of 43.4% male predominance. This is because of the fact that males in our region visit more often as compared to females, and there is hesitance in the female group regarding visiting hospitals owing to religious and cultural trends. Study conducted by Gowri L Kanthan *et al.* in Australia revealed that Females (61.2%) were affected more than Males (38.8%) which is fairly contradicting to our research results i.e Males predominance (71.7%). Another global study conducted by Shaheen P Shah *et al.* revealed that female Cataract incidence and surgery was more common everywhere except South-East-Asia and Eastern Mediterranean Region, which explains our research results. Yuen *et al.* conducted research also showed that majority of the Cataract

patients were Farmers (37.5%) or Retired (36.8%) which contradicts with our study results i.e most of the affected patients were Govt./Private Employees (39.3%).<sup>21</sup> The reason for this difference is that Ethiopia is an under-developed country in which most people belong to the Farming Profession while our study is conducted in an urban area where most of the population works as Govt./Private Employees, and Farmers are very small in number. According to the research conducted by Kein Gia To *et al.* cataract is most common in the age group 50-70 years. This result is a little bit contradicting to our result which shows most frequent age group is 40-50 years. However, if we take into count the people aged above 50 in our research it shows that our study result fairly matches with the research conducted by Kein Gia *et al.* Difference in the values also accounts for the geographical differences and also the fact that elderly people visit tertiary care hospitals less commonly in Pakistan. Research of the Kein Gia *et al.* also showed that 64.5% of the Cataract patients were married which is consistent with our research results i.e. 79.33%. A little more percentage is due to the fact that religious and cultural norms in our country strongly favor marriage.

#### CONCLUSION:

Cataract mostly affects Married Males aged Avg. 31-50 years with Bilateral eye involvement most common. The majority of the people belong to Urban areas working as Govt. and Private Employees.

#### RESULTS AND MAIN FINDINGS:

Table no. 1:

| Age         | Frequency | Percent |
|-------------|-----------|---------|
| 11-20 Years | 11        | 3.7     |
| 21-30 Years | 52        | 17.3    |
| 31-40 years | 68        | 22.7    |
| 31-50 years | 82        | 27.3    |
| 51-60 years | 74        | 24.7    |
| 61-70 years | 13        | 4.3     |
| Total       | 300       | 100.0   |

Graph no. 1 :

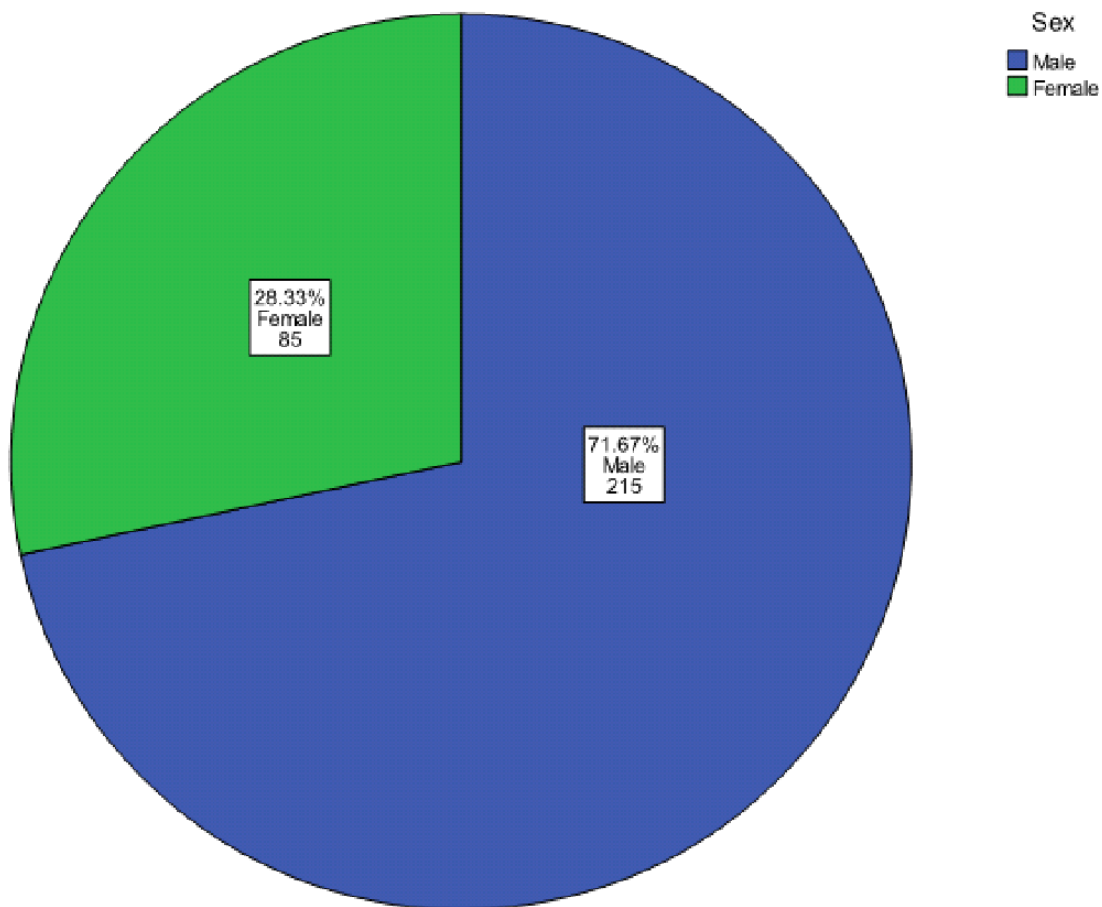
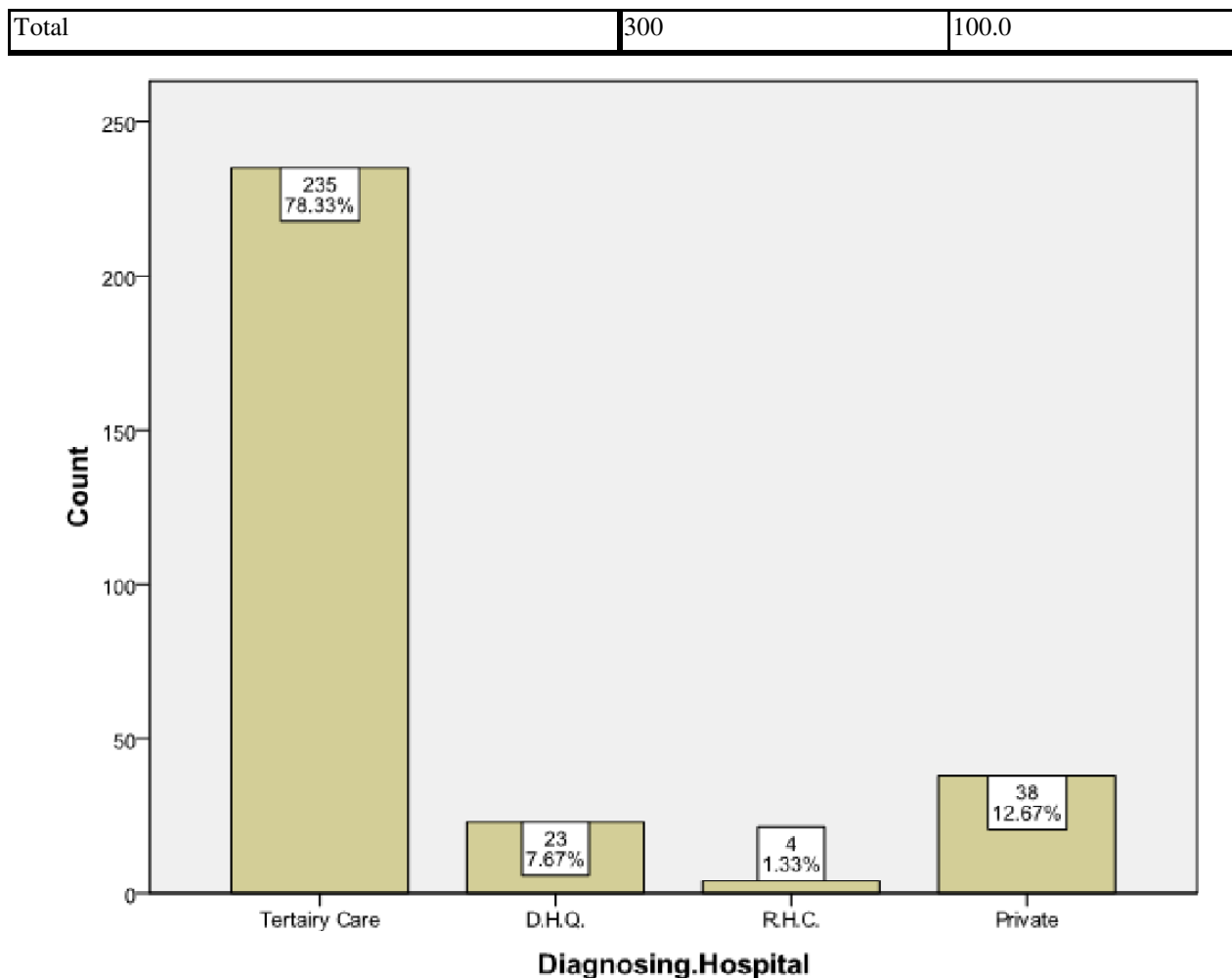


Table no. 2:

| Occupation              | Frequency | Percent |
|-------------------------|-----------|---------|
| Unemployed              | 41        | 13.7    |
| Housewife               | 48        | 16.0    |
| Labourer/Farmer         | 34        | 11.3    |
| Skilled Worker          | 44        | 14.7    |
| Govt./Private Employees | 118       | 39.3    |
| Businessman             | 15        | 5.0     |

| Family Income | Frequency | Percent |
|---------------|-----------|---------|
| Up to 10000   | 7         | 2.3     |
| 10001-20000   | 66        | 22.0    |
| 20001-30000   | 137       | 45.7    |
| 30001-40000   | 54        | 18.0    |
| 40001-50000   | 29        | 9.7     |
| above 50000   | 7         | 2.3     |



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