# Eye Health Seeking Behavior And Barriers Of Eye Health Services In Elder Population: A Community Based Study In Rural Lucknow

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### Abstract

Objective: The purpose of the study was determining the eye health seeking behavior of the population in the rural regions of Lucknow and also aims to identify the barriers for them seek eye health services. Study Design: Population based random sampling method with help of semi structure questionnaire. Method: Population based random sampling method was applied to select the study populations in eye camp at rural center of Era Medical College Lucknow. By using a questionnaire, face to face interview was conducted with the respondents in elder age group. Result: Of 156 respondents, 108 (69%) respondent never sought eye health services. The primary causes of not seeking eye health services were 'financial problem (21%), 'afraid to medical services' (17%) and 'do not want to go hospital' (16%). About 50% (78) of the illiterate respondents and out of them 48 did not go for eye check up. Conclusion: Female, illiterate, low socioeconomic status people, joint family, having no addiction and not aware of any systemic disease were less likely to seek eye health services in rural regions. Any future programs should take these factors into account when planning the eye health services in the rural regions.

Index term: Eye, Disease, Barrier; Behavior; Eye Health; rural; People; Seeking

### INTRODUCTION I.

It is estimated that over 90% of blind people reside in rural areas, where there are often limited or no eye health service facilities 1, 2, 3. Despite there being a large proportion of the population who are in require of the eye health services, the service utilization was found to be between 10% to 24% in low to lower-middle-income countries4. The use of available eye health services is essential for the reduction of the burden of visual impairment and blindness. Therefore, it is vital that eye health seeking behavior of the population be monitored and its barriers be eliminated by relevant sectors<sup>5</sup>. Research in these areas can be valuable tools to help understand how an individual responds to an illness in their personal situation. It can also investigate why some people opt out of certain services and why people are late in attending health service facilities and/or some level of health facilities are bypassed by intended users<sup>6</sup>.

Hence this study was conducted in order to identify the status of eye health seeking behavior and the reasons for the relevant population not seeking eye health services in rural regions of Lucknow.

#### STUDY DESIGN: II.

Population based random sampling method with help of semi structure questionnaire.

### **METHODS**

This study was a population-based study, which was conducted in the Rural Center of Era Lucknow Medical College & Hospital, Lucknow between July 2018 and December 2018. Recruited respondents were interviewed using the semistructured questionnaire, which had been developed to contain issues respondents had earlier identified as influencing eye care services in a pilot study. Questionnaire had closed and open ended questions and was developed in Hindi language, pretested, appropriately modified, before the final field administration. The questions were interpreted in the local language to allow for those who could not understand English. The first section contained questions regarding demographic information such as gender, age, marital status, religion, occupation, and the highest level of education, socioeconomic. However, persons engaged in large scale farming and housewives were assigned either low or poor socioeconomic status. The second section of the questionnaire consisted of questions related to the attitudes toward eye care services, access, perception about their eye problems, common disorder for which care was sought and previous exam. In relation to attitudes, respondents were asked about their views on the cost of chosen treatment for their eye problems, and their views on the various eye care services they consulted.

#### IV. RESULT

Data was analyzed by proportion & chi square test. The relationship between awareness of eye disease and demographic factors, such as age, gender and education status was assessed using the Chi-square test. A two-tailed p-value of less than 0.05 was considered statistically significant.

## **Background Characteristics of Participants**

Out of the 156 patients who consented to participate in the study and answered the questionnaire 108 (69%) were females and 48 (31%) males (figure 1).

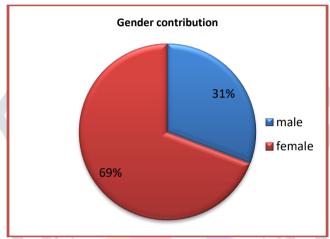


Figure 1:- Gender Contribution

Out of the 156 cases, the majority i.e. 78 (50%) were in age group of 50-59 years and 48 (31%) and 18 (11%) and 12 (8%) cases were in age group of 60-69 years and 40-49 years and 70-80 years respectively(figure 2).

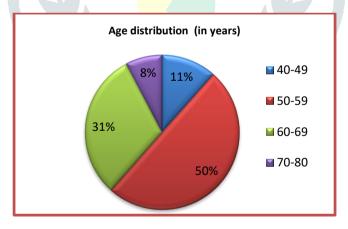


Figure 2:- Age group in years

Different work profile people participated in study. From ascending to descending order 69% were house wife who had simple house work and care taking of animals and family, 19% were farmer, 8% retired person who were Government servant in majority of work in filing and some of them were teacher in primary school in nearby village and 4% were worker who worked as laborers in construction and home based work (figure 3).

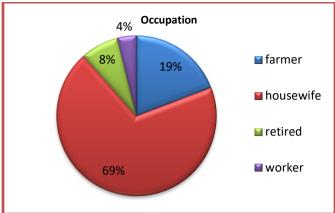
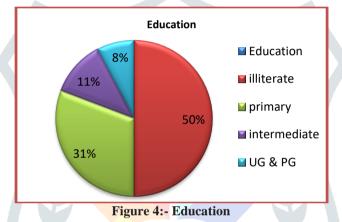


Figure 3:- Occupation

Individuals who participated in study had different educational level and majority of them were illiterate (50%) followed by 31% having primary level of education and 11% having Secondary level of education. Only 8% individuals were under graduate and post graduate (figure 4)



They also had different monthly income level to manage their family and income was consolidated for whole family despite of individual income level. Towards ascending to descending, 91% family had income level of Rs.10000/- Rs. 20000/-, 6% had 2000-10000 and only 3% had income level more than Rs.20000/.It indicates, that, maximum population of that area belong to poor and low income family (Figure 5).

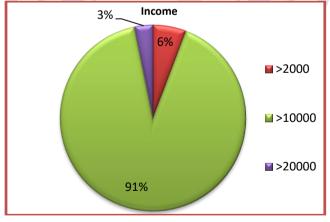


Figure 5:- Income

When we tried to know about construction and type of family, 77% family were joint and they were living at same houses, 15% family were nuclear and only 8% were residing single (Figure 6).

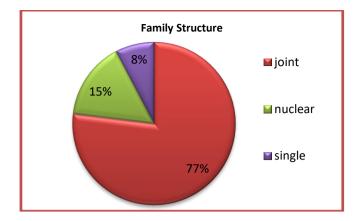


Figure 6:- Family Structure

The majority of participants were women and their personal habits were also different. 65% had no addiction. 27% people were using tobacco directly and few of them, 8%, were smoker and they were taking bidi (Figure 7).

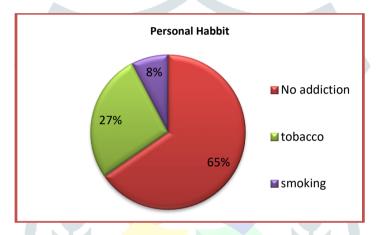


Figure 7:- Personal Habit

The person who was taking consent in study had Systemic Disease also. From ascending to descending order 34% were not aware about their systemic condition, they did not took any kind of examination, 31% person were healthy, 23% had Hypertension 8% had Diabetes Mellitus(DM) and 4% had multiple systemic disorder like Hypertension, DM and thyroid (Figure 8).

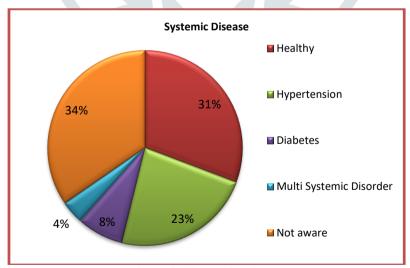


Figure 8:- Systemic Disease

# **Eye Health Seeking Behavior**

On the eye health seeking behavior, 108 (69%) of the 156 respondents reported they had never checked their eyes or visited the health facility with an eye problem and 48 (31%) had checked their eyes or visited to eye hospital. Out of 108; 72 were female and 36 were male. Similarly, out of 48, 36 were female and 12 were male in second category. There was significant association was found between gender and having had an eye examination. (P = 0.000) (Figure 9).

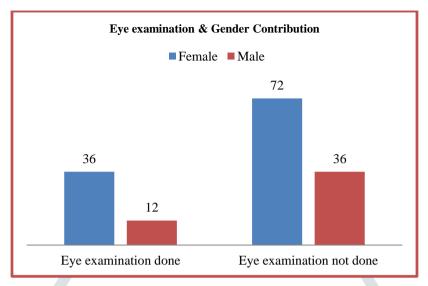


Figure 9:- Eye Examination & Gender Contribution

Likewise, there was association in occupation, education, socioeconomic status, family structure personal habit and systemic diseases with eye seeking behavior. The detail of every factor is summarized in table 1.

Table 1:- Association different factors with eye seeking behavior

	Factors	16	Eye Examination done	Eye Examination done	p value
1	Occupation	Farmer	done	30	
1	Occupation		26		
		House wife	36	72	.000
		Retired	6	6	.000
		Worker	6	-	
2	Education	Illiterate	30	48	
		Primary	12	36	000
		Intermediate		18	.000
		UG & PG	6	6	
3	Socioeconomic status	Poor	2	7	
		Lower	45	97	.000
		Middle	1	5	
4	Family structure	Joint	30	90	
		Nuclear	12	12	.017
		Single	6	6	
5	Personal habit	No addiction	18	84	
		Smoker	6	6	.000
		Tobacco	24	18	
6	Systemic Disease	Healthy	24	24	
		Not aware		54	
		Hypertension	12	24	.000
		Diabetes Mellitus	12	-	.000
		Multi systemic Disorder	-	6	

## **Barriers in the Eye Care**

The major reason for which participant would not have their eyes examined at the health facility was as follows: Of the 108; the most prevalent reason was the financial problem (21%), with the least being lack of trust in medical services and still manageable (11%) (Figure 11).

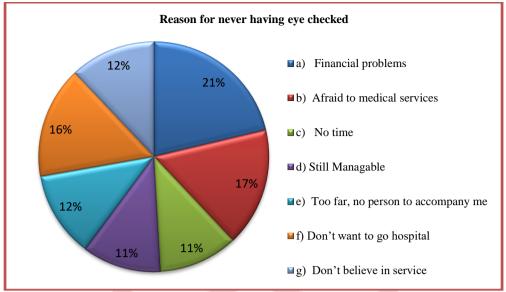


Figure 10:- Reason for never having eye checked

Of the 156, 74% of them reported having had an episode of an eye disorder within a year prior to the study, 14% of them reported having had an episode of an eye disorder within a six month and 12% had problem since a month (Figure 11).

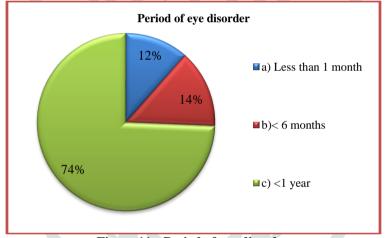


Figure 11:- Period of eye disorder

Of the 156 multiple responses for the ocular symptoms like, itchy eye, red eye, painful eye, and poor vision were the most common. Other symptoms such as a burning sensation, photophobia, blur vision, lid mass, and rainbow around lights were also reported. The symptoms reported generally did not influenced whether respondent wanted for care or not and did not determine where care was sought from.

### V. DISCUSSION

This study revealed that over 69% of respondents never sought eye health services. Nearly, 66.6% were female respondents. Almost 44.4% of respondents were illiterate. The 'person related' causes were observed as the leading causes of eye health seeking behavior which was also reported by the study conducted in south India (2014)<sup>7</sup>. Thus, Female, illiterate, low socioeconomic status people, joint family, having no addiction and not aware of any systemic disease were less likely to seek eye health services in rural regions. The reason this could be unspecified is due to the access and the availability of eye health services. These barriers could be lessened by conducting two events in the study districts: 1) by conducting awareness campaigns about available eye health services and 2) increasing the rural outreach eye health service activities.

Furthermore, out of the total respondents, 21% responded with 'financial problem' as the leading cause of not seeking eye health service in this study. This is dissimilar to the findings of a study conducted in rural south India but higher than a study conducted in a different south India study<sup>7,8</sup>. The studies conducted by Sapkota et al and by Srinivas et al. reported 'fear', 'decrease vision is natural in old age', 'affordability' and 'family support (no one to escort)' as the leading causes of not seeking eye health services,

but those results contradict the finding of this study<sup>7,8,9</sup> Similarly, 'afraid to medical services' was stated by 17% of respondents as a second major cause of not seeking eye health services, which is also found to be dissimilar to the study by Sapkota et al. 7. Additionally, the third major cause of not seeking eye health services was observed to be 'not want to go hospital' (16%) and fourth & fifth cause was 'too far' and 'not believe in medical services' (12%). Thus, this study claims that the trend of barriers to seeking eye health services could be varied based on the geographic location such as rural & urban, hill and low land areas of populations.

#### VI. CONCLUSION

From the study, it was found out that the majority of the people in the rural area had poor eye health seeking behavior. 'Female', 'illiterate', 'low socioeconomic status people', 'joint family', 'having no addiction' and 'not aware of any systemic disease' were less likely to seek eye health services in rural regions. It is therefore, recommended that general public should be educated on the awareness of common ocular diseases & health facility system.

#### VII. **ACKNOWLEDGEMENTS**

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