

Research Article

Knowledge Regarding Cataract among Young Adults

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ABSTRACT

Cataract is a visual impairment characterized by lens opacification, leading to blurred vision. Age-related cataracts are the most prevalent type in adults, whereas hereditary and metabolic factors are the primary causes in children. Cataracts disproportionately affect populations from low-to-medium socioeconomic backgrounds, with a significant burden in developing countries.

The present study was conducted to assess the knowledge regarding cataract among young adults residing in a selected village of Shirol, with a view to develop an information booklet.

Objectives:

1. To assess the level of knowledge regarding cataract among young adults.
2. To find out the association between knowledge levels and selected socio-demographic variables.

Methods: A non-experimental descriptive correlational research design was adopted. A total of 100 young adults residing in Shirol village were selected by non-probability convenient sampling technique. Data was collected using a structured knowledge questionnaire.

Results: The findings revealed that 61 participants (61%) had average knowledge, 9 participants (9%) had good knowledge, and 30 participants (30%) had poor knowledge regarding cataract. Chi-square analysis showed a significant association between knowledge level and gender ($\chi^2 = 11.567$, $p < 0.05$). No significant association was found with other socio-demographic variables such as age, religion, marital status, and source of information.

Interpretation and Conclusion: The study concludes that the majority of young adults had an average level of knowledge regarding cataract. This highlights the need for educational interventions. An information booklet can serve as an effective tool to enhance awareness among young adults.

Keywords: Knowledge, Cataract, Young Adults, Information Booklet.

INTRODUCTION

"Cataract is defined as the loss of lens transparency because of opacification of the lens. Based on the causes, cataracts can be classified into age-related cataracts, paediatric cataracts, and cataracts due to other causes. Age-related cataract is the most prevalent type in adults, with the onset between age 45 to 50 years, while in children hereditary and metabolic causes are most common.. Cataracts occur more frequently in low to medium socioeconomic background individuals, and therefore more common in developing countries.¹ Cataract is a serious eye disease accounts for the major cause of blindness globally. It is characterized by the loss of transparency and opacification of eye lens; an opaque lens scatters the light as it passes through it and prevents the sharpness of the image in the retina and vision becomes blurred. Cataract genesis is associated with numerous

factors acting over many years. The major reason lies behind the formation of cataract is the damage induced by free radicals, reactive oxygen/ nitrogen species to the crystalline lens. In this review, we have discussed the different events and mechanisms associated oxidative damage in the lens that gives rise to cataract genesis, the present treatment procedures and management of cataract.²

Cataract is responsible for over 51% of blindness in the Eastern Mediterranean Region. Although cataract can be easily surgically operated, in many countries access to eye care is limited. As people in the world live longer, the number of people with cataract is anticipated to grow. Cataract is also an important cause of low vision.³ There is no known prevention for the cataract. Reduction of cigarette smoking, ultraviolet light exposure may delay the development of cataract. The

WHO prevention of blindness programme provides technical support to Member States in the development of comprehensive eye care systems to address the burden of cataract.

MATERIALS AND METHODS

A Non-experimental descriptive correlational research design was used for this study. 100 young adults residing in selected Shirol village by Non-probability convenient sampling technique and the data was collected by using structured knowledge questionnaires.

RESULTS

SECTION I: Frequency and Percentage Distribution of Sample According to Demographic Characteristics.

This section outlines the distribution of participants based on their demographic characteristics. Descriptive statistics were used to analyze the data, which was then summarized in percentages. This approach provides a clear overview of the participant sample.

Demographic variables	Frequency (f)	Percentage (%)
1.Age in years		
a)20-25	23	23
b)26-30	26	26
c)31-35	31	31
d)36-40	20	20
2.Gender		
a)Male	52	52
b)Female	48	48
3. Religion		
a)Hindu	76	76
b)Muslim	11	11
c)Christian	11	11
d)Other	02	02
4. Marital Status		
a)Married	74	74
b)Unmarried	26	26
5.Source of information		
a)Books	23	23
b)Health Profession	05	5
c)Internet	48	48
d)Magzine	23	23%
e)Other	01	1%

Table1. Frequency and Percentage distribution of sample according to demographic characteristics.

The data presented in table no. 1 shows the demographic profile of 100 samples.

- ✓ Age Distribution: The majority of respondents (31%) are in the 31-35 age group, followed by 26% in the 26-30 group. The least represented age group is 36-40 (20%).
- ✓ Gender: The sample consists of 52% males and 48% females, indicating a nearly balanced gender distribution.
- ✓ Religion: The majority of respondents (76%) identify as Hindu, while 11% are

Muslim, 11% Christian, and 2% belong to other religions.

- ✓ Marital Status: A significant proportion of respondents (74%) are married, while 26% are unmarried.
- ✓ Source of Information: The internet is the most common source (48%) for information. Books and magazines each account for 23%, while health professionals contribute 5%. Other sources are minimally represented (1%).

SECTION II: Finding the Knowledge score related regarding cataract among young adults.

The knowledge related to cataract among young adults. The majority of

participants (61%) rated their performance as average, followed by 30% who rated it as poor, and 9% who rated their performance as good.

TABLE 2: Frequency and percentage distribution level of knowledge score related to cataract among young adults.

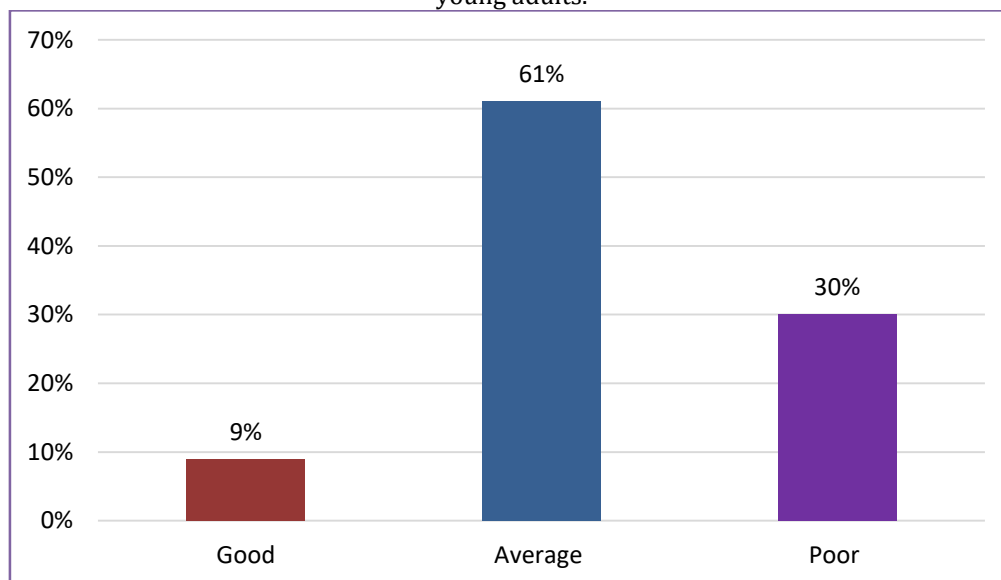


Fig. 2: Distribution of subjects according to their knowledge score

The data shows in table no 2 and fig, no 2 that 61% of participants rated their performance or knowledge in the specified category as "Average," with scores ranging from 11 to 20. A smaller group, 30%, rated their performance as "Poor," with scores between 0 and 10. Only 9% of participants rated their performance as "Good," with scores ranging from 21 to 30. This indicates that most individuals fall within the average range, while fewer individuals achieved higher or lower ratings.

SECTION III: Finding association between the knowledge score with their selected socio - demographic variables.

Chi – Square test was computed to the association between the knowledge related to cataract among young adults. The following hypothesis was formulated.

H1: There will be a significant association between level of knowledge score and socio-demographic variables

Table 3: Association between knowledge score with their selected socio-demographic variables

Category	Frequency	Percentage
Good (21-30)	9	9%
Average (11-20)	61	61%
Poor (0-10)	30	30%

Table 4: Mean Median and Mode of knowledge scores

Area of analysis	Mean	Median	Mode	S.D.
Knowledge scores	13.06	13	11	5.02

Table 4: Indicates that overall knowledge scores of young adults regarding cataract, Mean 13.06, Median 13, Mode 11, Standard deviation 5.02.

Sr.no	Demographic Variable	Knowledge	Score		Df	Calculated Value	Table Value	P-Value	Inference
		Good	Average	Poor					
1.	Age								
	20-25	3	15	5	6	7.272	12.592	0.296	NS
	26-30	0	17	9					
	31-35	5	15	11					
	36-40	1	14	5					
2.	Gender								
	Male	3	40	9	2	11.567	5.991	0.003	S
	Female	6	21	21					
3.	Religion								
	Hindu	8	47	21	6	2.815	12.592	0.832	NS
	Muslim	1	7	3					
	Christian	0	6	5					
	Other	0	1	1					
4.	Marital Status								
	Married	6	46	22	2	0.322	5.991	0.852	NS
	Unmarried	3	15	8					
5.	Sources								
	Books	1	17	5	8	6.71	15.507	0.568	NS
	Health Profession	1	2	2					
	Internet	6	27	15					
	Magzine	1	15	7					
	Other	0	0	1					

CONCLUSION

The study concludes that the majority of young adults had only an average level of knowledge regarding cataract. This highlights the importance of structured educational interventions. Developing and providing an information booklet can serve as an effective strategy to improve awareness and promote preventive eye health.

Relevance for Clinical Practice

Educating young adults about cataract is crucial, as early awareness can promote preventive practices, encourage timely eye check-ups, and reduce the future burden of avoidable blindness. Nurses and community health workers play a key role in delivering health education materials, such as information booklets, to bridge knowledge gaps and improve eye health outcomes.

Conflict Of Interest

The authors have no conflicts of interest regarding this investigation.

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