

Research Article

Teaching Programme on Knowledge Regarding Cataract Among Old Age People in Selected Community Area of Jammu Province

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A B S T R A C T

The aim of the present study was to increase the knowledge regarding cataracts among old-age people in selected community areas of Jammu province.

Objectives of the study were

- To assess the pretest knowledge score regarding cataracts among old-age people in a selected community area of Jammu province.
- To assess the post-test knowledge score regarding cataracts among old-age people in a selected community area of Jammu province.
- To determine the impact of a structured teaching program on knowledge scores regarding cataracts among old-age people in a selected community area of Jammu province by comparing pre-test and post-test knowledge scores.
- To determine the association of pretest knowledge score regarding cataracts among old-age people in a selected community area of Jammu province with the selected demographic variables.

Methodology: The study was based on Ludwig von Bertalanffy's general system theory. A quantitative research approach was used. The purposive sampling technique was used to select the sample. A total of 100 old-age people were taken for the study. A structured knowledge questionnaire was used to collect the data. Descriptive and inferential statistics were used to analyze the data.

Result: In the pretest, 10% of old-age people had inadequate knowledge. After implementation of a structured teaching program in the posttest, more than half of the old-age people had adequate knowledge (97%), and 3 percent of the old-age people had moderate knowledge. The overall mean pretest knowledge score was 70.30 with a standard deviation of 2.678. The overall mean post-test knowledge score was 89.70 with a standard deviation of 1.262.

Conclusion: The majority of the study subjects had moderate knowledge regarding cataracts, which indicates that they need to get awareness about the cataracts.

Keywords: Old Age, Effectiveness, Structured Teaching Program, Cataract, Knowledge

Introduction

The sense of vision is very important to every single person in this world. Vision allows the individual to do the basic things such as reading and writing. It also allows the individuals to do other daily activities such as learning, walking, buying, and taking care of personal hygiene without help from others.¹

According to Brenner (2004), the ability to see the world clearly can easily be taken for granted. The eye is a sensitive, highly specialized sense organ subject to disorders, many of which lead to impaired vision. Impaired vision affects an individual's independence in self-care, work and lifestyle choices, sense of self-esteem, safety, ability to interact with society and environment, and overall quality of life. Many of the leading causes of visual impairment are associated with aging (e.g., cataracts, glaucoma, and macular degeneration), and two-thirds of the visually impaired population is older than 65 years of age. Younger people are also at risk for disorders, particularly traumatic injuries. As we discuss many of the diseases, cataracts and their impact on old people are not negligible. Not only the old people, but also any people who stand near the risk factors of cataracts are more prone to this hazard.²

The complete lack of form and visual light perception occurs in total blindness, which is clinically recorded as "No Light Perception" (NLP). A visual acuity (vision) of 20/200 (n/60) or less in the better eye with the best correction possible is called legal blindness.³

For statistical purposes, aging is commonly referred to specific age groups, for example, those aged 60 years and above. However, the aging process begins even before we are born and continues throughout life. Although some associate aging with mental decline and physical impairment, this is a misconception, as the majority of older people enjoy good health and lead active lives. While the functional capacity of biological systems (e.g., vascular system, sensory perception) declines after peaking in early adulthood, health and activity in older age are largely determined by the exposures and actions of an individual during the whole lifespan. Thus, individuals are able to influence how they age by adopting age-associated changes and by adopting healthier lifestyles.⁴

Age-related cataract (ARC) remains the leading cause of blindness in the world. According to the World Health Organization's (WHO) latest assessment, ARC is responsible for 51% of the world's blindness, which represents about 20 million people.⁷

A cluster of epidemiologic studies in populations from around the world already has evaluated and identified several factors associated with an increased risk of ARC, such as age, sunlight exposure, and alcohol consumption.⁸

It is estimated that globally there are approximately 100 million eyes with cataracts, causing a visual acuity less than

6/60, and this figure is likely to be 3 to 4 times more for cataracts causing a visual acuity of less than 6/18. These estimates are projected to double in the next 20 years if the present eye care service delivery does not improve. The number of people blind from cataracts in the world is increasing by approximately 1 million per year, and the number of operable cataract eyes with a visual acuity of less than 6/60 is increasing by 4.5 million per year.¹⁰

The global incidence of cataracts was around 5 million; in India alone, 3.8 million people become blind from cataracts each year. A figure of 1000 new blind people from cataracts per million population per year is estimated in developing countries. As per age-related prevalence, people of old age (>50 years) have the highest prevalence of visual impairment, representing more than 30 percent of the population in developed countries and 15 percent of them in developing countries.¹³

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Objectives of the Study

- To assess the pretest knowledge score regarding cataract among old age people in a selected community area of Jammu province.
- To assess the post test knowledge score regarding cataract among old age people in a selected community area of Jammu province.
- To determine the impact of structured teaching program on knowledge score regarding cataract among old age people in a selected community area of Jammu province by comparing pre test and post test knowledge score.
- To determine the association of pretest knowledge score regarding cataract among old age people in a selected community area of Jammu province with the selected demographic variables.

Result

In pre test 10% old age people were had inadequate knowledge. After implementation of structured teaching programme in post test, more than half of the old age people had adequate knowledge (97%) and 3 per cent of the old age people had moderate knowledge. The overall mean pre test knowledge score was 70.30 with the standard deviation of 2.678. The overall mean post test knowledge score was 89.70 with the standard deviation of 1.262.

Analysis and interpretation

Section-A

Section-B

Table 2: Frequency & Percentage distribution of pre-test level of knowledge Sample Size n=100

Table 3 Percentage distribution of post-test level of knowledge Sample Size n= 100

Section-C

Table 4: Comparison of frequency & percentage distribution of pre-test and post-test level of knowledge Sample Size n=100

Table 5: Comparison of descriptive statistics of pre-test and post-test Scores of knowledges. Sample Size n=100

Table 6: Table Showing Association of Scores and Demographic Variables. Sample Size n=100

Table 7: Item wise analysis representing comparison of pre-test and post-test level of knowledge

Table I. Demographic Profile of the Subjects Sample Size n= 100

Variables	Opts	Percentage	Frequency
Age	80-85years	64.0%	64
	86-90years	27.0%	27
	91-95years	9.0%	9
	96 years and above	0.0%	0
Gender	Male	74.0%	74
	Female	26.0%	26
Dietary	Veg	82.0%	82
	Both	9.0%	9
Place of residence	Rural	100.0%	100
	Semirural	0.0%	0
	Urban	0.0%	0
	Semiurban	0.0%	0
Monthly Income	LessthanRs. 5000	20.0%	20
	Rs.5001–Rs. 10000	44.0%	44
	Rs.10001–Rs. 20000	36.0%	36
	MorethanRs. 20000	0.0%	0
History of Diseases	Diabetesmellitus	29.0%	29
	Hypertension	45.0%	45
	Arthritis	26.0%	26
	None	0.0%	0
Previous Diseases	a)	9.0%	9
	b)	0.0%	0
	c)	35.0%	35
	d)	27.0%	27
	e)	29.0%	29
Type of Family	Joint	73.0%	73
	Nuclear	27.0%	27
	Extended	0.0%	0
Educational Status	Illiterate	80.0%	80
	Primary Educational	20.0%	20
	Secondary Educational	0.0%	0
	HigherSecondary	0.0%	0
	Graduate and above	0.0%	0

Table 2.Criteria Measure of Pretest Knowledge Score

Score level (N=100)	Pre test (%)
Inadequate knowledge. (0-11)	10(10%)
Moderate Knowledge. (12-17)	58(58%)
Adequate Knowledge. (18-23)	32(32%)

Maximum Score=23 Minimum Score=0

Table 3.Criteria Measure of Post Test Knowledge Score

Score Level (N=100)	Post test (%)
Inadequate Knowledge. (0-11)	0(0%)
Moderate Knowledge. (12-17)	3(3%)
Adequate Knowledge. (18-23)	97(97%)

Maximum Score=23 Minimum Score=0

Table 4.Criteria Measure of Knowledge Score

Score Level (N=100)	Pre test (%)
Inadequate Knowledge. (0-11)	10(10%)
Moderate Knowledge. (12-17)	58(58%)
Adequate Knowledge. (18-23)	32(32%)

Maximum Score=23 Minimum Score=0

Table 5.Comparison of Pre-Test and Post-Test Knowledge Scores

Mean%	Pre Test Knowledge
Average	16.17

Table 6.Association Between Score Levels and Selected Demographic Variables

Association of Post Test Knowledge Scoreswith Selected Socio-Demographic Variables.									
Variables	Opts	Adequate- knowledge	Moderate- knowledge	Inadequate- knowledge	Chi Test	P Value	df	Table Value	Result
Age	80-85years	63	1	0	2.535	0.282	2	5.991	Not Significant
	86-90years	25	2	0					
	91-95years	9	0	0					
	96yearsandabove	0	0	0					
Gender	Male	72	2	0	0.086	0.769	1	3.841	Not Significant
	Female	25	1	0					
Dietary	Veg	80	2	0	2.402	0.301	2	5.991	Not
Pattern	NonVeg	8	1	0	-	-	-	-	Significant
	Both	9	0	0					
	Rural	97	3	0					

Place of residence	Semirural	0	0	0		N.A		N.A	
	Urban	0	0	0					
	Semiurban	0	0	0					
Type of Family	Joint	72	1	0	2.469	0.116	1	3.841	Not Significant
	Nuclear	25	2	0					
	Extended	0	0	0					
Educational Status	Illiterate	77	3	0	0.773	0.379	1	3.841	Not Significant
	Primary Educational	20	0	0					
	Secondary Educational	0	0	0					
	HigherSecondary	0	0	0					
	Graduate and above	0	0	0					
Occupation	Employee	8	1	0	4.653	0.098	2	5.991	Not Significant
	Housewife	33	2	0					
	Business	56	0	0					
	Others,specify	0	0	0					
Monthly Income	LessthanRs.5000	20	0	0	1.506	0.471	2	5.991	Not Significant
	Rs.5001–Rs.10000	43	1	0					
	Rs.10001–Rs.20000	34	2	0					
	More than Rs.20000	0	0	0					
History of Diseases	Diabetesmellitus	28	1	0	1.147	0.564	2	5.991	Not Significant
	Hypertension	43	2	0					
	Arthritis	26	0	0					
	None	0	0	0					
Previous Diseases	a)	9	0	0	3.183	0.364	3	7.815	Not Significant
	b)	0	0	0					
	c)	35	0	0					
	d)	25	2	0					
	e)	28	1	0					

Table 7.Item-Wise Analysis of Pre-Test and Post-Test Knowledge

Itemwise analysis	Preincorrect (%)	Postcorrect (%)	Preincorrect (F)	Postcorrect (F)
Qno.1	59.0%	100.0%	59	100
Qno.2	45.0%	100.0%	45	100
Qno.3	93.0%	100.0%	93	100
Qno.4	93.0%	100.0%	93	100
Qno.5	85.0%	100.0%	85	100
Qno.6	90.0%	100.0%	90	100
Qno.7	100.0%	99.0%	100	99
Qno.8	90.0%	100.0%	90	100
Qno.9	97.0%	96.0%	97	96

Qno.10	11.0%	96.0%	11	96
Qno.11	13.0%	100.0%	13	100
Qno.12	95.0%	100.0%	95	100
Qno.13	6.0%	4.0%	6	4
Qno.14	6.0%	100.0%	6	100
Qno.15	84.0%	100.0%	84	100
Qno.16	90.0%	100.0%	90	100
Qno.17	95.0%	98.0%	95	98
Qno.18	88.0%	99.0%	88	99
Qno.19	98.0%	96.0%	98	96
Qno.20	93.0%	88.0%	93	88
Qno.21	93.0%	77.0%	93	77
Qno.22	48.0%	66.0%	48	66
Qno.23	45.0%	43.0%	45	43

Discussion

Accordance with the objectives of the study and hypothesis, to assess the level of knowledge among old age peoples in data collected from 100 old Age respondents were tabulated, analyzed and interpreted by using the descriptive and inferential statistics based on the formulated objectives of the study.

Conclusion

The following conclusions were drawn on the basis of present study to assess the effectiveness of STP on knowledge regarding cataract among old age people in selected area of Jammu province.

- In pre test, more than half of the old age people had low knowledge regarding cataract.
- In post test, 97% old age people had adequate knowledge, 30% old age people had moderate knowledge and there will be no old age people who had inadequate knowledge implicating the effectiveness of STP intervention.

Recommendations

The present study was conducted on a smaller sample, a more extensive study on larger sample is recommended to arrive at generalization regarding cataract awareness. The study can be conducted in the different set ups like government and private hospitals and ophthalmic research centre hospitals. An experimental study can be carried out with different teaching methods to know the effectiveness of each teaching method on cataract awareness among the clients with cataract.

Sources of finding: None

Conflicts of Interest: None

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