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A STUDY TO ASSESS THE KNOWLEDGE REGARDING THE VISION LOSS AND RELATED RISK FACTORS AMONG THE INDIVIDUALS OF 45 YEARS AND ABOVE AT KOLLAM, WITH A VIEW TO DEVELOP AN EDUCATIONAL BOOKLET

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ABSTRACT
The research project undertaken was “A study to assess the knowledge regarding the vision loss and related risk factors among the individuals of 45 years and above at Kollam, with a view to develop an educational booklet". The objective of the study wasto assess the knowledge regarding the vision loss and related risk factors among the individuals of 45 years and above in kollam, to find the association between knowledge regarding the vision loss and related risk factors among the individuals of 45 years and above and selected demographic variables, to develop an educational booklet to assess the knowledge regarding the vision loss and related risk factors among the individuals of 45 years and above in kollam. Non experimental design (descriptive study) was adopted for this study. The study was conducted among 100individuals of 45 years and above in Kollam. In order to assess the knowledge regarding the vision loss and risk factors. The study sample was selected by non probability convenient sampling technique. The tool used for the data collection consists of demographic proforma and structured questionnaire. The present study revealed that 15% of individuals had inadequate knowledge, 49% had moderate knowledge, and 39% had adequate knowledge regarding the vision loss and related risk factors among the individuals of 45 years and above. In this study association was found between knowledge and demographic variables like education and source of information. No significant association was found between age, sex, occupation, family history, dietary pattern. Based on the findings the investigator has drawn implications which were of vital concerns in the field of nursing practice, nursing administration, nursing pattern, nursing education for future development.

KEYWORDS: Assess, knowledge, information booklet, vision loss, risk factors, information booklet.

INTRODUCTION
Vision is what allows you to see the world around you. You have vision thanks to several components within the eye and brain that work together. The eye provides the optics to produce an image of the external world upon the retina.The light radiating from objects in the external world enters the eye through the clear and transparent cornea. The pupil is an opening at the front of the eye that regulates the amount of light allowed to pass into the eye.

The sense of vision involves the eye and the series of lenses of which it is composed, the retina, the optic nerve, optic chiasm, the optic tract, the lateral geniculate nuclei in the thalamus and the geniculocalcarine tract that projects to the occipital cortex. Main function of vision are the way sight works is why it is one of the five senses. The eyes are the physical portal through which data from your environment is collected and sent to your brain for processing. The brain plays its part by converting the light that went into your eyes into usable information – how far away, how bright, what color.[1]

Humans are built to collect information with their eyes and even reduced vision quality creates a negative effect. A regular vision test is a small investment for something that has such a huge impact on our lives.[1]

Age is a main factor which affects our vision, vision decreases with advancement of age. The number of mucous cells in the conjunctiva may decrease with age. Tear production may also decrease with age, so that fewer tears are available to keep the surface of the eye moist. Both of these changes explain why older people are more likely to have dry eyes. However, even though the eyes tend to be dry normally, tearing can be significant when the eyes are irritated, such as when an onion is cut or an object contacts the eye.[2]

Arcussenilis (a deposit of calcium and cholesterol salts) appears as a gray-white ring at the edge of the cornea. It is common among people older than 60. Arcussenilis does not affect vision.

Some diseases of the retina are more likely to occur in old age, including macular degeneration, diabetic retinopathy (if people have diabetes), and detachment of the retina. Other eye diseases, such as cataracts, also become common.[2]

The muscles that squeeze the eyelids shut decrease in strength with age. This decrease in strength, combined with gravity and age-related looseness of the eyelids, sometimes causes the lower eyelid to turn outward from the eyeball. This condition is called ectropion. Sometimes, because of age-related looseness affecting a different part of the eyelid, the lower eyelid turns inward, causing the eyelashes to rub against the eyeball. This condition is called entropion. When the upper eyelid is affected, the lid can droop, a condition called ptosis.[2]

In some older people, the fat around the orbit shrinks, causing the eyeball to sink backward into the orbit. This condition is called enophthalmos. Because of lax tissues in the eyelids, the orbital fat can also bulge forward into the eyelids, making them appear constantly puffy. Enophthalmos, if significant, may cause a slight blockage of a person's peripheral (side) vision.[3]

The muscles that work to regulate the size of the pupils weaken with age. The pupils become smaller, react more sluggish to light, and dilate more slowly in the dark. Therefore, people older than 60 may find that objects appear dimmer, that they are dazzled initially when going outdoors (or when facing oncoming cars during night driving), and that they have difficulty going from a brightly lit environment to a darker one. These changes may be particularly bothersome when combined with the effects of a cataract.[3]

Other changes in eye function also occur as people age. The sharpness of vision (acuity) is reduced despite use of the best glasses, especially in people who have a cataract, macular degeneration, or advanced glaucoma (see table Some Disorders That Affect Mainly Older People). The amount of light that reaches the back of the retina is reduced, increasing the need for brighter illumination and for greater contrast between objects and the background. Older people may also see increased numbers of floating black spots (floaters). Floaters usually do not significantly interfere with vision.[3]

Even in the absence of established pathology, elderly people should be advised to have an eye examination at least every 2 years so that eye disease, which is often asymptomatic, may be detected and treated, thereby preventing further visual loss. Many elderly people regard deteriorating vision as an inevitable sign of ageing – this is not the case and timely intervention may help prevent loss of sight and the associated negative impact on quality of life that this brings.

Good communication between primary and secondary care providers is key in ensuring that treatment and management decisions are appropriate and include consideration of comorbidities and lifetime expectancy. Patients with established glaucoma almost invariably require lifelong follow-up in view of the potential for irreversible visual loss, although the frequency of review should be informed by the patient's age, life expectancy and the extent and, critically, the rate of progression of visual field loss.[3]

STATEMENT OF THE PROBLEM

A study to assess the knowledge regarding the vision loss and related risk factors among the individuals of 45 years and above at Kollam, with a view to develop an educational booklet.

OBJECTIVES

- To assess the knowledge regarding the vision loss and related risk factors among the individuals of 45 years and above in kollam.
- To find the association between knowledge regarding the vision loss and related risk factors among the individuals of 45 years and above and selected demographic variables
- To develop an educational booklet to assess the knowledge regarding the vision loss and related risk factors among the individuals of 45 years and above in kollam.

OPERATIONAL DEFINITION

Assess: In this study assess refers to statistical measurement of the knowledge regarding the vision loss and related risk factors among the individuals of 45 years and above in kollam.

Knowledge: In this study knowledge refers to the understanding of individuals on knowledge regarding vision loss and related risk factors.

Vision loss: In this study vision loss refers to the reduction in the ability to see.

Risk factors: In this study risk factor refers to something that increases the person's chances of developing disease.

Educational booklet: It is a small booklet that contain information regarding vision loss and related risk factors

MATERIALS AND METHODS

The research design adopted for this study was non experimental design (Descriptive study). The present study was conducted in different areas in Kollam. Sample consist of 100 individuals with the age of 45 years and above, at kollam., who met the inclusion criteria for the study. Convenient sampling technique was used in this study.

The data analysis were done under following headings

Section A: Consist of demographic variables (such as age, gender, occupation, education, source of information, hereditary, dietary pattern).

Section B: Consist of 20 multiple choices questions regarding knowledge of vision loss and its risk factors. Each with only one as the appropriate answer. The maximum score for the correct answer is one and zero for the wrong answers.

Section C: Educational booklet.

RESULTS AND DISCUSSION

Section A: Description of demographic variables

Consist of demographic variables (such as age, gender, occupation, education, source of information, hereditary, dietary pattern).

Demographic data

- In the study the data showed that.

Table 1: Age In Years.

SL.NO	AGE	KNOWLEDGE LEVEL		
		Good	Average	Poor
1	45 - 50	20	24	8
2	51-55	8	5	2
3	56-60	8	12	4
4	61-65	3	5	1

- Table 1 shows that among 100 individuals, 39 had good knowledge 46 had average knowledge and 15 had poor knowledge.

Table 2: Gender.

SL.NO	GENDER	KNOWLEDGE LEVEL		
		Good	Average	Poor
1	MALE	30	30	4
2	FEMALE	15	15	6

Table 2 shows that, among the 64 males, 30 had good knowledge, 30 had average and 4 individuals had poor knowledge. among the 36 males, 15 had good knowledge, 15 had average and 6 individuals had poor knowledge.

TABLE 3: EDUCATION

SL.NO	EDUCATION	KNOWLEDGE LEVEL		
		GOOD	AVERAGE	POOR
1	UPTO SSLC	5	32	2
2	HIGHER SECONDARY	22	10	3
3	GRADUATE	9	2	8
4.	POST GRADUATE	3	2	2

TABLE 3 shows that among the 100 individuals 39 have education status upto SSLC 45 were higher secondary 19 were graduates and 7 were post graduates.Among this,39 have good knowledge, 46 had average and 15 had poor knowledge.

TABLE 4: OCCUPATION

SL. No.	OCCUPATION	KNOWLEDGE LEVEL		
		GOOD	AVERAGE	POOR
1	UNEMPLOYEE	20	12	5
2	GOVT. EMPLOYEE	11	19	5
3	PRIVATE EMPLOYEE	5	12	2
4	OTHERS	3	3	3

Table 4 shows that among 37 are unemployed, 20 had good knowledge, 12 had average and 5 had poor knowledge. Among the 35 government employee, 11 had good knowledge, 19 had average knowledge and 5 had poor knowledge. Among 19 private employee 5 had good knowledge12 had average and 2 had poor knowledge. Among 9 individuals, 3 had good knowledge 3 had average knowledge and 3 had poor knowledge.

Table 5: Family History.

SL NO	FAMILY HISTORY	KNOWLEDGE LEVEL		
		GOOD	AVERAGE	POOR
1	HAVE HISTORY OF VISION LOSS	25	33	8
2	NO HISTORY	9	9	3
3	HAVE HISTORY OF OTHERS	5	4	4
4	EYE DISORDERS	0	0	0

Table shows that among 66 individuals having family history of vision loss, 25 had good knowledge, 33 had average and 8 had poor knowledge. Among the 21 individuals have no history of vision loss, 9 had good knowledge, 9 had average knowledge and 3 had poor knowledge. Among 13 individuals with other diseases, 5 had good knowledge 4 had average and 4 had poor knowledge.

Table 6: Diet.

SL NO	DIET	KNOWLEDGE LEVEL		
		GOOD	AVERAGE	POOR
1	NON VEGETARIAN	30	33	8
2	VEGETARIAN	7	11	5
3	MIXED DIET	2	2	2
4	SPECIFIC DIET	0	0	0

Table shows that among 71 non vegetarians, 30 had good knowledge, 33 had average and 8 had poor knowledge. Among the 23vegetarians, 7 had good knowledge, 11 had average knowledge and 5 had poor knowledge. Among 6 mixed diet, 2 had good knowledge 2 had average and 2 had poor knowledge.

Table 7: Source of Information.

SL NO	SOURCE OF INFORMATION	KNOWLEDGE LEVEL		
		GOOD	AVERAGE	POOR
1	MAGAZINE	7	8	3
2	RELATIVES	18	11	2
3	SOCIAL MEDIA	12	20	8
4	OTHERS	2	7	7

Table shows that among 18 individuals get information from magazines. from this, 7 had good knowledge, 8 had average and 3 had poor knowledge. 31 individuals get information from relatives 18 had good knowledge, 11 had average knowledge and 2 had poor knowledge. among 40 individuals get information from social media. from this, 12 had good knowledge, 20 had average and 8 had poor knowledge. Remaining 16 individuals 2 had good knowledge, 7 had average and 7 had poor knowledge.

Table 8: Association between knowledge and demographic variables.

Sl no	Variables	Level of knowledge			X^2	df	Level of significance
		Good	Average	Poor			
1	**Age in years**						
	45-50 yrs	20	24	8	11.25	6	**S**
	51-55 yrs	8	5	2			
	56-60 yrs	8	12	4			
	61-65 yrs	3	5	1			
2	**Sex**						
	Male	30	30	4	16.29	4	S
	Female	15	15	6			
3	**Education**						
	Upto SSLC	5	32	2	44.85	6	NS
	Higher secondary	22	10	3			
	Graduate	9	2	8			
	Post graduate	3	2	2			
4	**Occupation**						
	Unemployee	20	12	5	9.77	6	S
	Govt employe	11	19	5			
	Privateemploye	5	12	2			
	Others	3	3	3			
5	**Family History**						
	Have history of vision loss	25	33	8	10.81	6	S
	No history	9	9	3			
	Have history of others	5	4	4			
	Eye disorder	0	0	0			
6	**Diet**						

	Non vegetarian	30	33	8	7.56	6	S
	Vegetarian	7	11	5			
	Mixed diet	2	2	2			
	Specific diet	0	0	0			
7	**Source of information**						
	Magazine	7	8	3	17.81	6	NS
	Relatives	18	11	2			
	Social media	12	20	8			
	Others	2	7	7			

0.05 level of significance
NS- non-significant
S - Significant

Table 8 shows that there is association was found between knowledge and demographic variables like education and source of information. No significant association was found between age, sex, occupation, family history, dietary pattern.

DISCUSSION

The present study was conducted to assess the knowledge regarding the vision loss and related risk factors among the individuals of 45 years and above in at Kollam. In order to achieve the objectives of the study non experimental research design was adopted. The Sample was selected by the non probability convenient sampling. The sample consisted of 100 individuals of 45 years and above. The finding of the study has been discussed in relation to objectives and other similar studies.

Discussion of findings with other studies based on objectives

- **Description of demographic variables**

In the present study the demographic data revealed that 52% percentage of individuals were under the age of 45 - 50 years 15% of individuals were under the age group of 51-55 years and 24% of individuals were under the age group of 56-60years and 9% of individuals were under the age group of 61-65 years.40% were males, 60%% were females. Most of them. Are studied upto SSLC, 35%studied in higher secondary, 19% were graduated and 7% were post graduated and above. It was found that 66% have history of vision loss, 21% have no history of illness, 13% have history of other diseases and no one have the family history of eye disorders. 71% of individuals are non vegetarian, 23% were vegetarians, 6% were under in mixed diet, others are included in specific diet.Regarding the source of information about vision loss and its risk factors, it is revealed that 18% received knowledge about vision loss through Books, 31%obtained information from relatives and 40% got information through social medias and 11% got information from other sources.

- **To assess the knowledge regarding the vision loss and related risk factors among the Individuals of 45 years and above in a selected area at kollam.**

The present study revealed that 15% of individuals had inadequate knowledge, 49% had moderate knowledge, and 39% had adequate knowledge regarding the vision loss and related risk factors among the individuals of 45 years and above.

- **To find out the association between the knowledge regarding the vision loss and related risk factors among the individuals of 45 years and above and selected demographic variables.**

The association was computed by using the Chi square test. It was inferred that the present study showed significant association between knowledge and demographic variables like education, source of information. Regarding education calculated value 44. 8 is greater than table value 12.59 at 0.05 level of significance. Regarding source of information 17.81 calculated value 16.29 is greater than table value 12.59 at 0.05 level of significance. There is no significant association between knowledge and demographic variables like age, sex, occupation, family history,dietary pattern. Regarding age the calculated value 11.25is less than the table value 12.59 at 0.05 level of significance. Regarding sex calculated value 16.83 is less than the table value 12.59 at 0.05 level of significance. Regarding the family history the calculated value 10.81 is less than the table value 12.5 9 at 0.05 level of significance. Regarding dietary pattern calculated value 7.56 is greater than table value 12.59 at 0.05 level of significance.

An association was found between knowledge and demographic variables like education and source of information. No significant association was found between age, sex, occupation, family history, dietary pattern.

CONCLUSION

The present study was aimed to assess the knowledge regarding the vision loss and related risk factors among the individuals of 45 years and above in at Kollam. An information booklet regarding vision loss and its related risk factor was given to the individuals of 45 years and abov

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