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Research Paper

A STUDY TO ASSESS THE KNOWLEDGE REGARDING GLAUCOMA AND ITS MANAGEMENT AMONG PATIENTS WITH GLAUCOMA IN SELECTED HOSPITALS AT UDAIPUR WITH A VIEW TO DEVELOP A SELF INSTRUCTION MODULE

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Glaucoma is a group of eye diseases that can cause vision loss and blindness by damaging a nerve in the back of your eye called the optic nerve. The symptoms can start so slowly that you may not notice them. There is no cure for glaucoma, but early treatment can often stop the damage and protect your vision. Glaucoma is one among the leading causes of irreversible blindness in India. Lack of awareness and lack of knowledge of this disease is the most important cause for the late presentation which leads to blindness. Glaucoma is a complex eye condition characterized by elevated intraocular pressure (IOP) that may progress to vision loss over time. This eye condition is categorized into primary or secondary types and further into open-angle or closed-angle variants. Adult glaucoma includes primary open-angle glaucoma (POAG) and angle-closure glaucoma, as well as secondary open and angle-closure glaucoma, with a specific focus on the most prevalent type, POAG. Diagnosis is often made at the late stage of the condition when much damage to the eye has already occurred. Raising the public level of awareness through public education for periodic eye checks is one of the effective measures for its early detection and management.

AIM: To assess the pre & post test knowledge among Patients with Glaucoma in selected hospitals at Udaipur With a view, To Develop a self instruction module.

1. To assess the knowledge regarding glaucoma and its management among patients in selected Hospitals at Udaipur.
2. To find an association between the level of knowledge with selected sociodemographic variables.
3. To develop a Self instruction module regarding glaucoma and its management.

Hypothesis H 1 : There will be a significant association between the level of knowledge with selected socio-demographic variables.

Material and Methodology: A Quantitative research approach and descriptive research design was used. Convenience sampling technique was used to select 150 patients in selected hospitals at Udaipur. Data was analyzed by using descriptive and inferential statistics.

Results: In pre-test majority 53.30% had moderate knowledge, 40% had inadequate knowledge and 6% had adequate knowledge.

Conclusion: The study concluded that further interventional researches should be conducted regarding prevention and management of Glaucoma to enhance the knowledge.

KEYWORDS: Glaucoma awareness, Knowledge, Primary Open Angle Glaucoma, (POAG), Intraocular pressure

INTRODUCTION

The human eye is an important part of the human body, and it is a window that reveals the outside world to mankind. The proper functioning of visual sensory organs is

necessary for leading a good quality of life.

Visual impairment negatively affects the quality of life by making the affected person dependent on others. One of the most important problems with the human eye is blindness that can have



hereditary or acquired causes. Glaucoma is a group of eye diseases that can cause vision loss and blindness by damaging a nerve in the back of your eye called the optic nerve. The symptoms can start so slowly that you may not notice them. The only way to find out if you have glaucoma is to get a comprehensive dilated eye exam. There is no cure for glaucoma, but early treatment can often stop the damage and protect your vision. Glaucoma is a condition marked by the gradual loss of peripheral vision and irreversible damage to the optic nerve and retinal ganglion cells, making it a significant public health concern. Its multifactorial etiology involves anatomical, genetic, vascular, and immune factors. Glaucoma is a fundamental public health concern, considering that, after cataracts, it is the second cause of irreversible blindness. Currently affecting over 60 million individuals worldwide, this number is expected to surpass 110 million by 2040. Elevated pressure readings during screening, surpassing 21 mmHg, indicate pressures beyond normal physiological levels and raise concerns about potential future damage to the optic nerve due to glaucoma. Managing glaucoma involves personalized strategies based on the type and severity of the condition. Available treatments cannot reverse vision loss; they aim to lower IOP, a key risk factor, to prevent further damage and vision loss. Therapeutic options

such as eye drops, laser procedures, and surgeries are focused on reducing IOP. Monitoring disease progression involves using tools like tonometry, visual field tests, OCT, and vision loss mapping.

Material and Methods:

A Quantitative research approach and descriptive research design was used. Convenience sampling technique was used to select 150 patients in selected hospitals at Udaipur.

Variables

- i. Socio- demographic variables- Socio-demographic variables are age, gender, religion, educational status, occupation, monthly family income, dietary pattern and previous knowledge.
- ii. Research variables- In this study knowledge of patients regarding prevention of Glaucoma and its management is research variables.

Data Analysis

Collected data were tabulated and analyzed using Descriptive and inferential statistics.

Results and Discussion:

In pre-test majority 53.30% had moderate knowledge, 40% had inadequate knowledge and 6% had adequate knowledge.

In this study a Quantitative research approach with descriptive research design is used. The sample size was 150 and was selected by non-probability convenience sampling technique. Self-structured knowledge questionnaire tool is

used for data collection and the data was analysed by descriptive statistics i.e. frequency and percentage distribution and inferential

statistics i.e. chi square test is used to find out association.

Table No. 1 : Analysis of pre-existing level of knowledge score regarding prevention and management of glaucoma

S.No.	Level of Knowledge	Number of Respondents	Percentage
1.	Inadequate ($\leq 50\%$)	60	40%
2.	Moderate (51-75%)	80	53.30%
3.	Adequate ($>75\%$)	10	6%

Table No. 2 : Association between the pre-test knowledge score with their selected socio-demographic variables.

S. no.	Socio-demographic variables		Knowledge score						Chi square test		
			Inadequate		Moderate		Adequate		χ^2 value	df	p-value
			N	%	N	%	N	%			
1.	Age in years	20-25 years	12	20%	26	33%	2	18.2%	5.4	6	0.48
		26-30 years	15	25%	15	19%	4	36.4%			
		31-35 years	18	30%	21	26.5%	4	36.4%			
		36-40 years	15	25%	17	21.5%	1	9.0%			
2.	Gender	Male	32	53.33%	43	54.44%	8	72.7%	1.4	2	0.47
		Female	28	46.67%	36	45.6%	3	27.3%			
3.	Religion	Hindu	49	82%	74	93.7%	11	100%	7.0	6	0.13
		Muslim	10	17%	5	6.3%	0	0%			
		Christian	0	0%	0	0%	0	0%			
		Other	1	1.0%	0	0%	0	0%			
4.	Educational status	Illiterate	22	36.67%	6	7.6%	0	0%	23.5*	6	0.0006
		Primary education	7	11.67%	10	12.7%	1	9.1%			
		Secondary education	10	16.66%	14	17.7%	3	27.3%			
		Graduate and above	21	35%	49	62.0%	7	63.6%			
5.	Occupational Status	Housewife	21	35%	14	17.7%	0	0%	16.4*	6	0.01
		Farmer	12	20%	13	16.5%	1	9.1%			
		Unemployed	11	18.33%	16	20.2%	1	9.1%			
		Other and above	16	26.67%	36	45.6%	9	81.80%			
6.	Monthly family income	<Rs. 10,000	9	15%	15	18.98%	2	18.18%	16.5*	6	0.01
		Rs.10001-Rs.25000	45	75%	39	49.37%	4	36.36%			
		Rs.25001-Rs.50000	4	6.67%	13	16.45%	4	36.36%			
		<Rs.50000	2	3.33%	12	15.2%	1	9.1%			
7.	Dietary pattern	Vegetarian	54	90%	55	69.6%	10	90.90%	9.6*	2	0.008
		Non-vegetarian	6	10%	24	30.4%	1	9.1%			
8.	Previous knowledge	Mass media	2	3.3%	7	9%	0	0%	17.3	10	0.066



In the present study, the level of knowledge score was categorized into inadequate, moderate, and adequate level of knowledge. Knowledge score among patients depicts the majority of samples (53.30%), (40%) had inadequate knowledge and only (6%) had adequate knowledge regarding prevention and management of glaucoma. The Chi square test was used to find out significant association between levels of knowledge score with their selected demographic variables. The finding of chi square shows that there is association between the level of knowledge score with demographic variables like educational status, occupation, monthly family income, dietary pattern. Here the p- value is less than 0.05 (level of significance).

So the H1 is accepted whereas demographic variables like age in years, gender, and religion and previous knowledge is not having any association with pre-test score. Here the p- value is greater than 0.05 (level of significance).

CONCLUSION:

On the basis of the study, Awareness of glaucoma and its management can play an important role in encouraging people to seek timely eye care and can therefore help in reducing the burden of visual impairment. An early awareness levels will improve diagnosis rates. Increasing awareness about glaucoma is important as the disease occur over a long

period of time and is often recognized when the disease is quite advanced. Awareness on glaucoma helps to get early disease detection and prevention from Blindness.

REFERENCES:

1. Van der Aa HPA, Comijs HC, Penninx BWJH, van Rens GHMB, van Nispen RMA. Major Depressive and Anxiety Disorders in Visually Impaired Older Adults. *Invest Ophthalmol Vis Sci.* 2015 Feb 5;56(2):849–854.
2. Ezinne NE, Shittu O, Ekemiri KK, Kwarteng MA, Tagoh S, Ogbonna G, Mashige KP. Visual Impairment and Blindness among Patients at Nigeria Army Eye Centre, Bonny Cantonment Lagos, Nigeria. *Healthcare (Basel).* 2022 Nov 18;10(11)
3. Mahabadi N, Foris LA, Tripathy K. StatPearls [Internet]. StatPearls Publishing; Treasure Island (FL): Aug 22, 2022. Open Angle Glaucoma.
4. Wagner IV, Stewart MW, Dorairaj SK. Updates on the Diagnosis and Management of Glaucoma. *Mayo Clin Proc Innov Qual Outcomes.* 2022 Dec;6(6):618-635.
5. Cook C, Foster P. Epidemiology of glaucoma: what's new? *Can J Ophthalmol.* 2012 Jun;47(3):223-6.
6. Gallo Afflitto G, Aiello F, Cesareo M, Nucci C. Primary Open Angle Glaucoma Prevalence in Europe: A Systematic Review and Meta-Analysis. *J Glaucoma.* 2022 Oct 01;



31(10):783-788.

7. Singh K, Bhushan P, Mishra D, Kaur K, Gurnani B, Singh A, Pandey S. Assessment of optic disk by disk damage likelihood scale staging using slit-lamp biomicroscopy and optical coherence tomography in diagnosing primary open-angle glaucoma. *Indian J Ophthalmol.* 2022 Dec;70(12):4152-4157.

8. Jonas JB, Aung T, Bourne RR, Bron AM, Ritch R, Panda-Jonas S. Glaucoma. *Lancet.* 2017 Nov 11;

390(10108):2183-2193.

9. Parab A, Kavitha S, Odayappan A, Venkatesh R. Clinical and demographic profile of patients less than 40 years of age presenting to glaucoma services at a tertiary care eye hospital in South India. *Indian J Ophthalmol.* 2022 Dec;70(12):4186-4192.

10. Khazaeni B, Zeppieri M, Khazaeni L. StatPearls [Internet]. StatPearls Publishing; Treasure Island (FL): Nov 26, 2023. Acute Angle-Closure Glaucoma.