



Journal Homepage: -www.journalijar.com
**INTERNATIONAL JOURNAL OF
 ADVANCED RESEARCH (IJAR)**

Article DOI:10.21474/IJAR01/8497
 DOI URL: <http://dx.doi.org/10.21474/IJAR01/8497>



RESEARCH ARTICLE

ASSESSMENT OF KNOWLEDGE, AWARENESS ON GLAUCOMA AMONG GLAUCOMA PATIENTS & ITS IMPACT ON DAILY LIFE.

P.Nirmala Jyothi Pamu¹ and Chandana Priyanka.S².

1. Associate professor, Ophthalmology, Andhra Medical College, Visakhapatnam.
2. Junior Resident, Ophthalmology, Andhra medical college, Visakhapatnam.

Manuscript Info

Manuscript History

Received: 04 December 2018
 Final Accepted: 06 January 2019
 Published: February 2019

Key words:-

Awareness, Glaucoma, Knowledge, Quality of life.

Abstract

Aim: To assess the knowledge, awareness on glaucoma and its impact on the quality of life of patients with glaucoma.

Materials and method: A questionnaire was delivered to patients willing to take part, and have a regular visit to the ophthalmology department, 250 patients who are diagnosed of having glaucoma and started on medical management with age between 40 -70 years were included in the study.

Results: Among 250 patients who attended to the glaucoma department 58% were females and males were 42% with the mean age of 51.2 years (ranges 40-70) of them. Among them literates were 32%, illiterates were 68%. 82% patients in our study never heard about glaucoma before diagnosed as having glaucoma. 65% of patients reported negative emotions, 85% were facing difficulties in daily activities due to visual problems, 38% reported poor compliance to the treatment.

Conclusion: Our study highlights that there is a need for improving the awareness on this asymptomatic disease and reinforcement of knowledge and practice on proper instillation of eye drops among patients by counselling can help patients to adhere to management and follow up.

Copy Right, IJAR, 2019,. All rights reserved.

Introduction:-

Glaucoma is not a single disease process but a group of disorders characterized by a progressive optic neuropathy, resulting in characteristic appearance of the optic disc and a specific pattern of irreversible visual field defects that are associated frequently but not invariably with raised intraocular pressure.

It is the second leading cause of world's irreversible blindness with 11 million of these patients from India^{1,2}. These blindness figures are expected to be doubled by 2020³. Several studies have estimated the awareness of this slowly progressive asymptomatic condition in southern India^{4,5,6}. It largely remains underdiagnosed due to its asymptomatic nature and lack of awareness amongst people^{7,8}.

Corresponding Author:-P.Nirmala Jyothi.

Address:-Associate professor, Ophthalmology, Andhra Medical College, Visakhapatnam.

Lack of awareness not only influences the timing of diagnosis but also the utilization of eye care services. The disease itself as well as its therapy has an impact on patient’s quality of life. In the management of the patients with glaucoma, it has been recognised that it is important to take their whole life situation into consideration.

So the study is undertaken to understand the knowledge & awareness and impact of glaucoma on their life using a questionnaire which would help us to understand the gap and to have a holistic approach of the disease.

Aim:-

To assess the knowledge, awareness of glaucoma and its impact on the quality of life of patients with glaucoma.

Materials and Methodology:-

It is a hospital-based cross-sectional study done in the outpatient department of ophthalmology at glaucoma department, 250 patients of either sex diagnosed as having glaucoma and on treatment were studied in addition being subjected to a detailed comprehensive eye examination and a specifically designed semi-structured questionnaire was used. Individuals with clinically significant impairment of visual functions other than glaucoma were excluded. After obtaining the consent from the patient to participate in the study a specifically designed semi-structured questionnaire was used which was available in local language and reading assistance to illiterate was provided. The questionnaire included three domains –the first section pertained to awareness which comprised 5 questions and about knowledge 5 questions, 4 questions for assessing the quality of life in glaucoma patients with multiple options. One question about the satisfaction of the information given by the doctor in the clinic. Each question has two options and the respondents has to tick the response of their choice. If they left unanswered it is assumed as they don’t have knowledge regarding the disease aspect.

Results:-

Among 250 patients who attended to the glaucoma clinic females were 58% and males 42% with the mean age of 51.2 years (ranges 40-70) of them. Among them literates were 32%, illiterates were 68%. Few of our patients gave expression of visual problems related to their disease, and 68% were satisfied with the information and care given.

Awareness about the disease

Figure 1:- Responses to awareness about disease

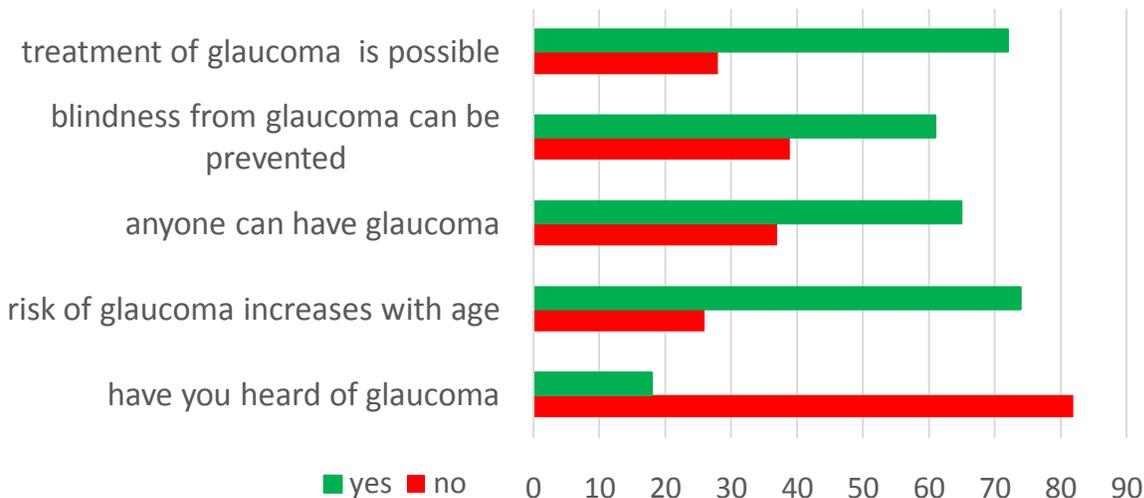


Figure 2:-Responses to questions on impact on quality of life

| Impact on quality of life | % |
|---|------|
| Felt anxious on learning the diagnosis | 30 % |
| Felt depressed | 14% |
| Fear of blindness | 21% |
| Difficulty in identifying the persons | 42% |
| Difficulty in walking stairs | 6.8% |
| Difficulty in watching t v | 30% |
| Difficulty in reading | 4.8% |
| Difficulty in driving vehicle | 2% |
| Difficulty in instillation of drops and affordability | 38% |
| Adverse effects on topical medication | 40% |

Figure 3:-

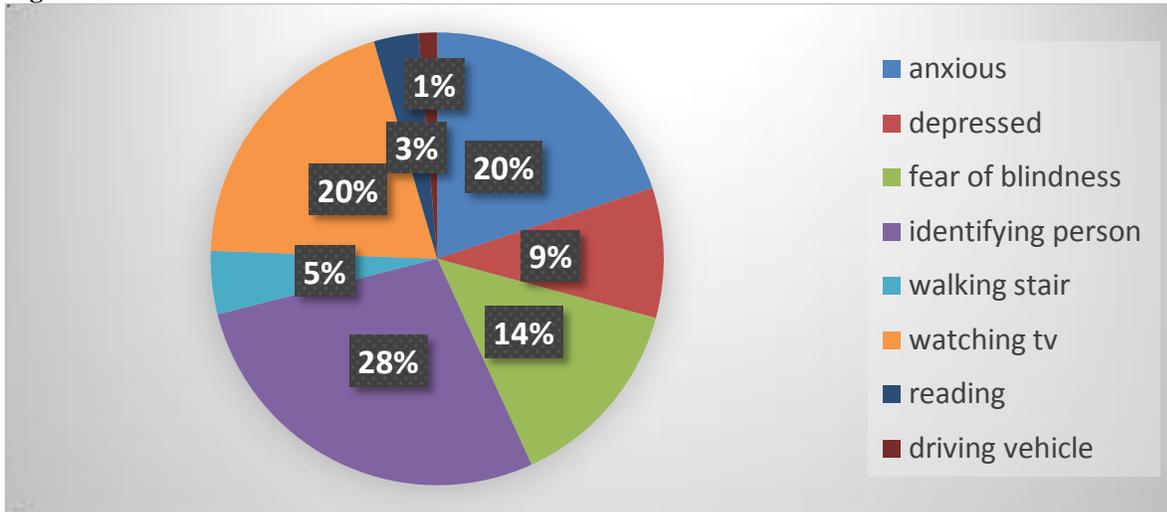
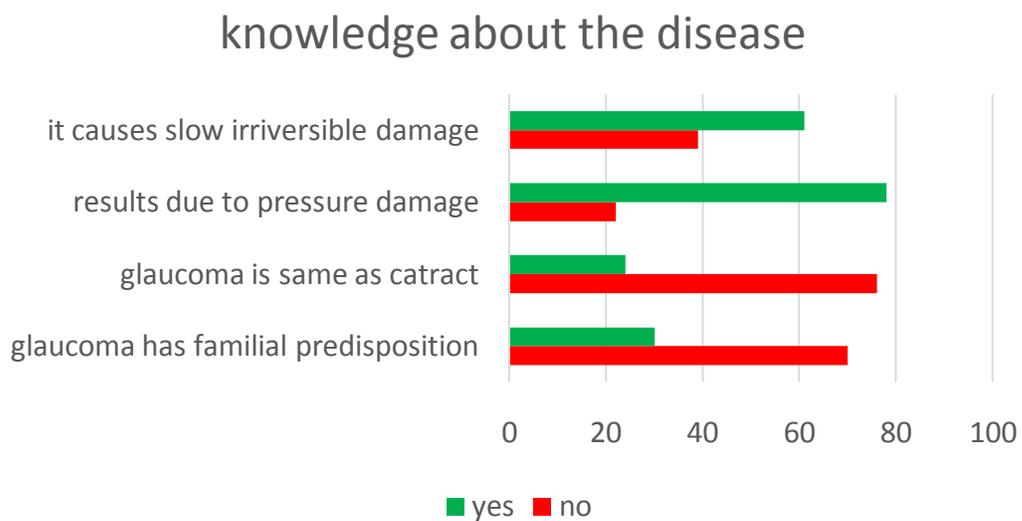


Figure 4:-Responses on knowledge of disease



Discussion:-

Among rural and urban India to the need for health education to improve knowledge, awareness and practice cannot be overemphasized.

82% patients in our study never heard about glaucoma before diagnosed, which coincides with the similar result in a study by Krishnaiah S et al⁶ where a total of **61 %** did not even know what glaucoma is. In study by Praveen et al stated only **8.3%** were aware of glaucoma. In the present study those individuals with higher elementary education and with family history of glaucoma had better understanding about the disease and had a regular follow up. In a study by Satyamangalam.R⁵ et al women and those with family those who were unaware and don't know the progression of disease had more visual problems and poor follow up. In the present study **39%** of the patients who are on treatment are unaware that blindness due to glaucoma can be prevented. **70%** are unaware of its familial predisposition. **68%** are satisfied with the information and care given by the treating health personnel, **32%** who are below 50 years showed more interest to know more about the disease and risk of going blind and other treatment modalities.

78% of the patients were able to answer that it is slow irreversible damage due to pressure effects on the nerve. **65%**of patients reported negative emotions. The fear of going blind and anxious was more among middle-aged persons and females(51%) which was also noticed by Tor Odberg¹⁰ et al where about 89% of them had fear of becoming blind more among young individuals .**85%** were facing difficulties in daily activities due to visual problems like identifying persons, walkingstairs, reading which coincides with the study done by Tor Odberg et al¹⁰ where the patients had faced difficulty in recognizing the persons, reading and climbing stairs.**38%** reported poor compliance for follow up and instillation of topical eye drops in those who were above 60 years and are dependent on help from others.

Limitations of the study:Small sample size, Questionnaire has its own limitations .

Conclusion:-

Our study highlights that there is a need for improving the awareness on this asymptomatic disease among general public. This can be achieved by health education, media and health camps, screening. Reinforcement of knowledge and practice on proper instillation of eye drops among patients by counselling can help patients to adhere to management and follow up and reduce the national and global burden of blindness due to glaucoma. Holistic approach is needed to understand the nature and the progression of an asymptomatic disease like glaucoma and to halt its progression and help in improving the quality of life of patients who are affected with glaucoma.



Figure 5,6,7:- showing the glaucoma awareness program conducted by the hospital.

References:-

1. Resikoff S, Pascolni D, Etya'ale D, Kocur I, Parajasegaram R, Pokharel GP, et al. Global data on visual impairment in the year 2002. Bull World Health Organ 2004Nov;82(11):844-51. DOI:S0042-96862004001100009.
2. George R, Ve RS, Vijaya L. Glaucoma in India: Estimated burden of disease. glaucoma. 2010Aug;19(6):391-7. DOI:10.1097/IJG.0b013e3181c4ac5b.
3. Quigley HA, Broman AT. The number of people with glaucoma worldwide in 2010 and 2020. Br J Ophthalmol. 2006 Mar;90(3):262-7. DOI:10.1136/bjo.2005.081224.
4. Dandona R, Dandona L, John RK, McCarty CA, Rao GN. Awareness of eye diseases in an urban population in Southern India. Bull World Health Organ. 2001;79(2):96-102.

5. Krishnaiah S, Kovai V, Srinivas M, Shamanna BR, Rao GN, Thomas R. Awareness of glaucoma in the rural population of Southern India. *Indian J Ophthalmol.*2005;53(3):205-8.DOI:10.4103/0301-4738.16685. Sathyamangalam RV, Paul PG, George R, Baskaran M, Hemamalini A, Madan RV, ET AL. Determinants of glaucoma awareness and knowledge in urban Chennai. *Indian J Ophthalmol.*2009;57(5):355-60.DOI: 10.4103/0301-4738.55073.
6. Tielsch JM, Sommer A, Katz J, Royall RM, Quigley HA, Javitt J. Racial variations in the prevalence of primary open angle glaucoma. The Baltimore eye survey. *JAMA.*1991Jul;266(3):369-74
7. Vijaya L, George R, Baskaran M, Arvind H, Raju P, Ramesh SV, et al. Prevalence of primary open angle glaucoma in an urban South Indian population and comparison with a rural population. The Chennai Glaucoma Study. *Ophthalmology.*2010 Apr;58(3):243-45.DOI:10.4103/0301-4738.62655.
8. Rewri P, Kakkar M. Awareness, knowledge, and practice: a survey of glaucoma in north Indian rural residents. *Indian journal of ophthalmology.* 2014 Apr;62(4):482
9. Odberg T, Jakobsen JE, Hultgren SJ, Halseide R. The impact of glaucoma on the quality of life of patients in Norway: I. Results from a self-administered questionnaire. *Acta Ophthalmologica Scandinavica.* 2001 Apr;79(2):116-20.
10. Elfride F.S, Philip s., Kishore .S.R. Knowledge, attitude, practice, quality of life assessment in glaucoma –a cross-sectional survey, *International journal of medical research and review* vol 4 no.12 (2016).