

Short Research Article

To assess the knowledge regarding glaucoma among general population

Abstract

Background: - The level of knowledge of glaucoma and their possible determinants in a group of people diagnosed with glaucoma and in a population based group without glaucoma. Studies performed on the prevalence of glaucoma have reported a high proportion of undiagnosed patients. Late diagnosis is related to increased risk of glaucoma associated with visual impairment and disability. Lack of awareness and non-availability of appropriate screening procedures are among the major reasons for non-diagnosis or late diagnosis of glaucoma. The present study has been undertaken to evaluate the level of awareness about glaucoma among the general population. **Objective:** - 1. To assess the knowledge regarding glaucoma among general population. 2. To find an association between the level of knowledge with selected socio demographic variables. **Material and method:** - The study was conducted in selected hospital. Descriptive research approach was used in this study. Hundred people in the general population were selected for the study. Structured knowledge questionnaire was used to collect the data. **Result:** - The show that 1 (1%) had poor level of knowledge, 27(27%) were having an average level of knowledge. Fifty seven percent (57%) had a good level of knowledge, fifteenth present 15 (15%) had very good knowledge. None exhibited excellent level of knowledge. The minimum score was 3 and the maximum score was 12, with the mean score for the test being 7.61 ± 1.814 and mean percentage of knowledge was 50.73%. **Key words:**-knowledge; glaucoma among general population.

INTRODUCTION

“prevention is better than cure”

Glaucoma is the second leading cause of blindness after cataracts and the leading cause of irreversible blindness in the world. Diagnosis is often made at the late stage of the condition when much damage to the retina and the optic nerve 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.¹

Early diagnosis and treatment is very important for glaucoma which is a progressive optic neuropathy. Ten percent of glaucoma patients end up with blindness throughout their life, so glaucoma is the second leading cause of blindness and the leading cause of irreversible blindness worldwide.²⁻³

Glaucoma screening programs comprise regular eye exams for healthy people in order to catch the disease earlier at asymptomatic stage, evaluation of the people at risk of glaucoma and management of the treatment and follow up.⁴

The success of the glaucoma screening programs is based on the knowledge about glaucoma among the general population and glaucoma patients. The knowledge about glaucoma influences the patients in terms of understanding the importance of regular eye exam, utilization of health care services and showing a better compliance for treatment.⁵⁻⁶

Material and Methods

- A exploratory descriptive study design. The study sample consists of 100 general population. Purposive sampling technique was used to select the samples answers. The study was conducted at Sawangi (Meghe) Wardha district. The tool was developed after intensive review of literature, consultation and discussion with experts and also with the personal experience of the researcher. The final tool consisted of two parts. Part 1: Demographic data such as age, gender, education, occupation, and general information. Part 2: questionnaire concerning the knowledge regarding glaucoma among general population. Instruments intended to be used Self Structured knowledge questionnaire. Criteria for selection of Sample Inclusion Criteria are 1.Those who are above age of 18 year. 2. Available at the time of data collection period. 3. People may know English,

Marathi, hindi. Exclusion criteria are 1. Those who are medical and paramedical professional. 2. Previously participated and individuals who had been exposed to similar research studies.

Results

Section I: Demographic characteristics. Table: 1 shows that majority of the sample 100% are in Age wise distribution of sample shows that 100% of them were of age 18-24 years, 45% were in the age of 25-34 years, 16 % were in the age group of 35-44 years and remaining 16% were of age above 45 years, respectively. Distribution of general population according to their age shows that 54% were male and 46% were female. Distribution of general population to their education shows that, 33% were primary, 12% were secondary, 39% were higher secondary and 16% were graduate and above. Distribution of general population to their nursing occupation shows that, 13% were government employees, 23% were private employees, 26% were business related, 26% were home makers, and 12% were un-employed. Distribution of general population based on their information levels showed that, 28% were in the mass media profession, 18% were self-reading, 26% were health care personal, and 28% had formal education.

Section II: To assess the knowledge regarding glaucoma among general population-The table 2 shows that 1 (1%) had poor level of knowledge, 27(27%) were having average level of knowledge. 57 (57%) were having good level of knowledge, 15 (15%) were having very good knowledge, score and 0(0%) were having excellent level of knowledge . The minimum score was 3 and the maximum score was 12 the mean score for the test was 7.61 ± 1.814 and mean percentage of knowledge was 50.73.

Section III: Association of knowledge score in relation to demographic variables. shows the association of knowledge score with the age in years of general population . The 'F'-value was calculated 1, 0.822 at 5% level of significance with df (3,96). Also the calculated 'p'-value is 0.485 which is more than 0.05. Hence it is interpreted that the age in years of general population not associated with their knowledge scores.

Conclusion

The following conclusions are drawn on the basis of the findings of the study.

- Age wise distribution of sample shows that 100% of them were belonging to the age of 18-24 years, 45% were in the age of 25-34 years, 16% were in the age group of 35-44 years and remaining 16% were belonging to the age of above 45 years respectively.
- Distribution of general population according to their age shows that 54% were male and 46% were female.
- Distribution of general population to their education shows that, 33% were primary, 12% were secondary, 39% were higher secondary and 16% were graduates and above.
- Distribution of general population to their nursing occupation shows that, 13% were government employee, 23% were private employee, 26% were business, 26% were home makers, 12% were un-employed.
- Distribution of general population to their information shows that, 28% were mass media, 18% were self reading, 26% were health personal, 28% had formal education.

Table 1: Percentage wise distribution of general population according to their demographic characteristics.

n=100

| Sr. no. | Demographic variable | Frequency | Percentage (%) |
|----------------|-----------------------------|------------------|-----------------------|
| 1. | Age | | |
| | 18-24 years | 45 | 45% |
| | 25-34 years | 16 | 16% |
| | 35-44 years | 16 | 16% |
| | 45 years above | 23 | 23% |
| 2 | Gender | | |

| | | | |
|---|---------------------|----|------|
| | Male | 54 | 54 % |
| | Female | 46 | 46% |
| 3 | Education | | |
| | Primary | 33 | 33% |
| | Secondary | 12 | 12% |
| | Higher-Secondary | 39 | 39% |
| | Graduate and above | 16 | 16% |
| 4 | Occupation | | |
| | Government employee | 13 | 13% |
| | Private employee | 23 | 23% |
| | Business | 26 | 26% |
| | Home maker | 26 | 26% |
| | Un-employee | 12 | 12% |
| 5 | Information | | |
| | Mass media | 28 | 28% |
| | Self-reading | 18 | 18% |
| | Health personal | 26 | 26% |
| | Formal education | 28 | 28% |

Table 2: Assessment with level of knowledge

n=100

| Level of knowledge score | Score | Percentage score | Knowledge score | |
|--------------------------|--------------|------------------|-----------------|------------|
| | | | Frequency | Percentage |
| Poor | 0-3 | 0-20% | 1 | 1% |
| Average | 4-6 | 21-40% | 27 | 27% |
| Good | 7-9 | 41-60% | 57 | 57% |
| Very Good | 10-10 | 61-80% | 15 | 15% |
| Excellent | 13-15 | 81-100% | 0 | 0% |
| Minimum score | 3 | | | |
| Maximum score | 12 | | | |
| Mean score | 7.61 ± 1.814 | | | |
| Mean Percentage | 50.73 | | | |

Bibliography

1. www. wrong diagnosis. com
2. Joyce M Black, “Medical Surgical Nursing”, 7th edition (2005), Elsevier publications, New Delhi, Pp; 747-748.

3. Brunner & Suddarth's, Textbook of Medical Surgical Nursing, Eleventh edition, Wolters Kluwer, Lippincott Williams & Wilkins, Philadelphia 2009; 2:2186-2200.
4. Black JM. Medical surgical nursing. 7th ed. Philadelphia: Elsevier Publications; 2004.
5. Lindsay Jones, M.D., and Brooks D. Cash, M.D., F.A.C.P., F.A.C.G., National Naval Medical Centre [online] 2008[cited 2012 Apr 20].
6. Quigley HA. Number of people with glaucoma worldwide. *Brit J ophthalmol.* 1996;80(5):389- 93.
7. Quigley HA, Broman AT. The number of people with glaucoma worldwide in 2010 and 2020. *Brit J ophthalmol.* 2006;90(3):262-7.
8. National Eye Institute. National Eye Health Education Program (NEHEP): Glaucoma. Available at <https://nei.nih.gov/nehep/programs/glaucoma>. Accessed 11 August 2017.
9. National Eye Institute. The prevalence of glaucoma. Available at <https://nei.nih.gov/eyedata/glaucoma#1>. Accessed 11 August 2017.
10. Noertjojo K, Maberley D, Bassett K, Courtright P. Awareness of eye diseases and risk factors: identifying needs for health education and promotion in Canada. *Canadian J Ophthalmology/J Canadien d'Ophtalmologie.* 2006;41(5):617-23.
11. Quigley HA, Broman AT. The number of people with glaucoma worldwide in 2010 and 2020. *Br J Ophthalmol.* 2006;90(3):262-7. PubMed PMID: 16488940.
12. Quigley HA. Number of people with glaucoma worldwide. *Br J Ophthalmol.* 1996 ;80(5):389-93. Review. PubMed PMID: 8695555.
13. Mason RP, Kosoko O, Wilson MR, Martone JF , Cowan CL Jr, Gear JC, Ross-Degnan D. National survey of the prevalence and risk factors of glaucoma in St Lucia West Indies Part I Prevalence findings. *Ophthalmology.* 1989 ;96(9):1363-8.
14. Budenz DL, Barton K, Whiteside-de Vos J, Schiffman J, Bandi J, Nolan W, Herndon L, Kim H, Hay-Smith G, Tielsch JM. Tema Eye Survey Study Group Prevalence of glaucoma in an urban West African population: the Tema Eye Survey. *JAMA Ophthalmol.* 2013;131(5):651-8.
15. Dandona L, Dandona R, Srinivas M, Mandal P, John RK, McCarty CA, Rao GN. Open-angle glaucoma in an urban population in southern India: the Andhra Pradesh eye disease study. *Ophthalmology.* 2000 ;107(9):1702-9.

UNDR PEER REVIEW