



**ORIGINAL RESEARCH PAPER**

**Ophthalmology**

**GLAUCOMA KNOWLEDGE, AWARENESS AND ATTITUDE AMONG HEALTH CARE PROFESSIONALS IN A TERTIARY HOSPITAL**

**KEY WORDS:** *Glaucoma, Health care professional, awareness*

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**ABSTRACT**

**Aim:** To assess knowledge, awareness and attitude about glaucoma among health care staff in a tertiary care hospital. **Material And Methods:** A cross-sectional, questionnaire-based observational study was conducted among 138 willing adult health-care professionals, including clinicians (non ophthalmologists), non-clinical doctors and paramedical employees. **Results:** The average age of the responders was 32.6+/-10.15. 57clinicians, 45 non-clinicians, and 36 paramedical staff members participated in the survey. Majority of the participants were aware about the association between glaucoma and increased IOP(81.9%), 42%thought glaucoma to be a reversible condition. Only 28% had screened themselves for glaucoma. **Conclusion:** According to the study, healthcare professionals, had inadequate understanding about glaucoma .This emphasizes the necessity of informing all levels of medical professionals about this irreversible disease and encouraging timely screening and effective therapy for preventative ophthalmic care.

**INTRODUCTION**

Glaucoma is responsible for blindness in 1.2 million people and accounts for 5.5% of total blindness, putting it as leading causes of irreversible blindness in India.<sup>[1]</sup> It is worth noting that glaucoma is the third leading cause of blindness in India, following closely behind cataracts and refractive errors.<sup>[2]</sup> Blindness from glaucoma is preventable but only when an optimum, timed intervention is offered. This highlights the importance of raising awareness about the condition and ensuring to prevent and manage this potentially debilitating disease.

**MATERIAL AND METHODS**

A cross-sectional, questionnaire-based observational study was conducted among 138 willing adult health-care professionals, including clinicians (non ophthalmologists), non-clinical doctors and paramedical employees at MVJ Medical college and research hospital over a period of 2 months.

**RESULTS**

A total of 138 participants completed the questionnaire. 53(38.4%) respondents were male while 85 (61.6%) were female. The mean age was 32.62 ± 10.16 years. There were 57clinicians, 45 non-clinical doctors, and 36 paramedical staff. Most participants (81%) had the knowledge that glaucoma is associated with increased intraocular pressure (IOP). Only 15% acknowledged that glaucoma can occur in eyes with normal IOP, the knowledge being poor across all the three groups. 76.8% thought glaucoma to be a preventable condition Majority (62%) had the knowledge that positive family history of glaucoma is a risk factor. Association of refractive error with glaucoma was the least known (10.8%). 41% thought that vision loss due to glaucoma is reversible. About 40.6% of subjects were aware that glaucoma generally affects peripheral side vision before central vision.

This data is summarized in multiple tables in the study such as Table 1 for Knowledge of glaucoma, Table 2 for knowledge about risk factors of glaucoma, Table 3 for knowledge about course of glaucoma.

In response to questions on factors that could worsen the progression of glaucoma, there was a significant difference in the response of the three groups with majority paramedics

lacking knowledge of the enquired aspects. Only 20.3% have undergone screening for glaucoma.

**[TABLE 1] Knowledge Of Glaucoma**

Knowledge of glaucoma	clinician n(%)	Non clinician n (%)	Paramedi cal n(%)	Total n(%)
Association with raised IOP	53(92.98)	44(97.78)	16(44.44)	113(81.88)
Association with optic nerve damage	32(56.14)	19(42.22)	12(33.33)	63(45.65)
Association with normal IOP	12(21.05)	06(13.33)	03(8.33)	21(15.22)
Glaucoma can be prevented	45(78.9)	37(82.2)	24(66.7)	106(76.8)

**[TABLE 2] Knowledge About Risk Factors Of Glaucoma**

Risk factor	Clinician n(%)	Non clinician n n(%)	Paramedical n(%)	Total n(%)
Hypertension	41(71.93)	33(73.33)	6(16.67)	80(57.97)
Diabetes	30(52.63)	25(55.56)	21(58.33)	76(55.07)
Family history of glaucoma	43(75.44)	34(75.56)	9(25)	86(62.32)
Previous history of trauma/surgery	33(57.89)	17(37.78)	20(55.56)	70(50.72)
Refractive error	12(21.05)	2(4.44)	1(2.78)	15(10.87)

**[TABLE 3] Knowledge About Course Of Glaucoma**

Course	Clinician n(%)	Non clinician n n(%)	Paramedical n(%)	Total n(%)
Glaucoma can be both painful and painless	18 (31.6%)	9 (20%)	0	27 (19.6%)
Glaucoma affects peripheral vision prior to central vision	21 (36.8%)	19 (42.2%)	16 (44.4%)	56 (40.6%)
Blindness due to glaucoma reversible	27 (47.4%)	14 (31.1%)	16 (44.4%)	57 (41.3%)

## DISCUSSION

As medical doctors are required to receive lectures on glaucoma during their training, the high level of awareness among them is not surprising.

There was a greater awareness of glaucoma and elevated IOP (81%) than of optic nerve damage (45%). Observations regarding awareness of high IOP are in accordance with similar studies conducted in India<sup>[3,4]</sup>. The general understanding of glaucoma is focused on its relationship to intraocular pressure rather than the optic nerve damage that results. Even among clinicians, knowledge of glaucoma occurring in eyes with normal IOP was low in our study.

In the present study, 41 % of subjects thought that blindness due to glaucoma is reversible. Similarly In studies by Ichhpujani et al<sup>[4]</sup> and Padmajothi et al<sup>[5]</sup> 39.5% subjects and 40% thought that the damage due to glaucoma is reversible. Despite working in a hospital with easy access to health care, only 20.3% have undergone screening for glaucoma.

Glaucoma vision loss is irreversible, even with surgical treatment hence it is essential for hospital staff to be aware of these characteristics, as the disease is typically advanced by the time a patient becomes aware of visual impairment.

## CONCLUSION

According to the study, healthcare professionals had inadequate understanding about glaucoma. This emphasizes the necessity of informing all levels of medical professionals about this irreversible disease and encouraging timely screening and effective therapy for preventative ophthalmic care.

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