### **Research Article**

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# Awareness of glaucoma among non-medical students in South India

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#### **ABSTRACT**

**Background:** Glaucoma is one of the leading causes of blindness in the world. According to World health organization glaucoma is the second leading cause of blindness worldwide. The objective was to study the level of awareness about glaucoma among students (non-medical).

**Methods:** A questionnaire based study was conducted among 430 students (non-medical) which tests the basic knowledge about glaucoma.

**Results:** Out of 430 students 94.18% (405/430) did not know what glaucoma was. 3.95% (17/430) have heard about glaucoma and they knew that it was a disease of the eye. Only 8 students 1.86% (8/430) were aware of the fact that glaucoma can lead to blindness.

**Conclusions:** The level of awareness of glaucoma is very low among students (non-medical). Efforts should be made to increase the awareness among them so that not only they will subject themselves for screening but also persuade their family members, friends and relatives for the same.

Keywords: Glaucoma, Non-medical students, Awareness

### INTRODUCTION

Glaucoma is one of the leading causes of blindness in the world. According to World health organization glaucoma is the second leading cause of blindness worldwide. Glaucoma becomes symptomatic only after significant irreversible damage has occurred. Therefore many cases remain undiagnosed. 5,6

Early detection and treatment plays a key role in the prevention of blindness due to this disease. Screening for glaucoma and its risk factors is very important for early diagnosis and treatment. The lack of awareness about glaucoma is a major problem. The patient does not subject themselves for ocular examination for the purpose of screening of glaucoma which increases the risk of damage due to glaucoma.<sup>7</sup>

We believe that increasing the awareness about glaucoma will play a significant role in reducing the prevalence of blindness due to this disease.

#### **Objectives**

The objective of this study was to assess the awareness of glaucoma among non-medical students.

#### **METHODS**

We conducted a survey among students to assess their level of awareness about glaucoma. A questionnaire based study was conducted among 430 students. The study population consisted of 430 non-medical students pursuing undergraduate and post graduate studies.

The questionnaire consisted of ten closed ended questions which tested their awareness of glaucoma (Appendix 1). The questionnaire also tested the basic understanding of the disease among the students who were aware of the disease. It also questioned their source of information about the disease. The questions were drafted in a way that it was simple and direct. The answers to majority of the questions were either a yes or no. The first question in the questionnaire tested whether they have heard about a disease called glaucoma. The students proceeded to the next set of questions only if the answer to the first question was yes.

#### RESULTS

A total of 430 students were enrolled for the study. Out of 430 students 94.18% (405/430) did not know what glaucoma was. 3.95% (17/430) have heard about glaucoma and they knew that it was a disease of the eye (Figure 1). Only 8 students 1.86% (8/430) were aware of the fact that glaucoma can lead to blindness (Figure 2). But they did not know that the blindness is irreversible. The source of information for all was a known person affected by glaucoma. Table 1 shows the responses to the various questions in the questionnaire.

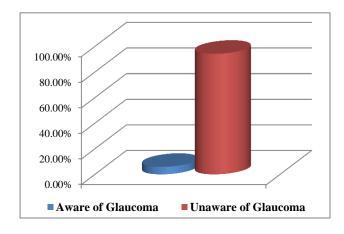


Figure 1: Awareness of glaucoma among non-medical students.

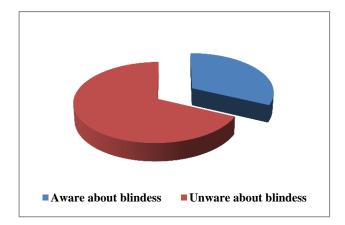


Figure 2: Awareness of blindness caused by glaucoma among students who were aware about the disease.

Table 1: Response of the students.

Question	Response
Have you heard of an eye disease called glaucoma?	No (405/430)
How did you come to know of this disease?	Known person (25)
Are they suffering from disease?	Yes (25)
Do you know that glaucoma can cause blindness?	Yes (8/25)
Do you know that the blindness due to glaucoma is irreversible?	No (8/25)
Do you know that by early detection and treatment blindness can be prevented?	No (8/25)
Do you know that high pressure can cause glaucoma and damage nerves?	No (8/25)
Do you know that by early detection and treatment blindness can be prevented?	No (8/25)
Do you know it is symptomatic only after major damage has occurred?	No (8/25)
Do you know that you are at risk if one of your family members has glaucoma?	No (8/25)

#### **DISCUSSION**

Glaucoma is one of the leading causes of irreversible blindness in the world. It is the second leading cause of blindness worldwide next only to cataract. The blindness due to cataract is treatable whereas that due to glaucoma is irreversible. Early diagnosis and treatment can delay the progress of the disease to blindness. Awareness remains a key tool in reducing blindness due to glaucoma since it is asymptomatic at an early stage. 8,9

In spite of availability of advanced eye care facilities in developing countries, the lack of awareness has led to sub optimal use of these facilities and as a result the prevalence of blindness due to glaucoma remains high.

Few studies about glaucoma awareness have been conducted among different groups of population. These studies show that the awareness of glaucoma in general population is low. In our study we found that the awareness of glaucoma was similar and it is very low among the students.

Previous studies have shown that relatives or friends are the source of information for glaucoma. <sup>12,13</sup> In our study the few students who were aware about glaucoma was because they had a friend or a relative who was affected by glaucoma.

This rationale of this study is to assess the awareness and knowledge about glaucoma among students so that steps can be taken to increase the awareness at this stage and thereby decrease the level of blindness due to glaucoma in the community. To the best of our knowledge there has been no study on the level of glaucoma awareness among students (nonmedical).

We chose students because of the age they are also more receptive to new information. Apart from subjecting themselves for screening they will play a significant role in spreading the awareness among family members and will also persuade them for screening.

The availability of internet and the widespread usage of social media by the young population can be used to spread the information about the disease. Information should be focused on the consequences of delayed treatment of glaucoma.

On the basis of this survey and other previous studies it is evident that awareness level of glaucoma is Low. Therefore effort should be taken to increase the awareness about this disease in the community. Focus should be more on the young population especially students.

#### **CONCLUSION**

In conclusion we find that the level of awareness of glaucoma is very low among students (non-medical). Efforts should be made to increase the awareness among them. This will not only result in increased number of young people subjecting themselves for screening but will help in the spread of awareness of glaucoma at the community level through friends, relatives and also through other modalities like social media.

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Institutional Ethics Committee

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# Appendix 1:

1. Have you heard of an eye disease called Glaucoma?	Yes/no
If yes proceed to the next question	
How did you come to know of this disease? Known person/Internet/others (Specify)	
3. Are they suffering from disease?	Yes/No
4. Do you know that Glaucoma can cause blindness?	Yes/No
5. Do you know that the Blindness due to glaucoma is irreversible?	
6. Do you know that there is a pressure in the eye?	
7. Do you know that High pressure can cause glaucoma and damage nerves?	
8. Do you know that by early detection and treatment blindness can be prevented?	
9. Do you know it is symptomatic only after major damage has occurred?	Yes/No
10. Do you know that you are at risk if one of your family members has glaucoma?	