

Analysis of Eye Donation Awareness in Engineering Students

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Abstract-- Eye is the most valuable part of our body without the eye sight one cannot feel the beauty of this world. There are a lot of people who aware about the eye donation. In medical area almost everyone know this term and they are already aware and they are also aware the society. But if we are looking at the engineering area then we feel that the number of students and engineers are not very much aware about eye donation. The main cause of blindness is corneal diseases. Blindness can be removed if we have a number of eye donors, for this we have to aware about the eye denotation in each area. We must aware and motivate the people for eye donation by which we can decrease the number of blind persons.

Keywords—Eye Donation, Weka

INTRODUCTION

It is very known that corneal diseases are the main cause of the blindness. It can be removed if we have some eye donor and for this we have to aware them about the eye donation. The persons who are related to Medical area they are very known about this term but if we are talking about the engineers then we found that the number of awareness is very less in comparisons to medical students, doctors, or working people in medical line. Our motive is to aware the persons about the eye donation by which we can help the society and decreases the number of blind people.

Eye donation is an act of donating one's eyes after his/her death. Only corneal blinds can be benefitted through this process no other blinds. It is an act of charity, purely for the benefit of the society and is totally voluntary [1].

Donated corneas are transplanted only after the donor's medical and social history has been obtained. Eye Bank is an organization which deals with the collection, storage and distribution of cornea for the purpose of corneal grafting, research and supply of the eye tissue for other ophthalmic purposes. Structurally, it has administrative and medical components. The entire operation is supervised by a Medical Director, who is usually a well-qualified corneal surgeon assisted by an Administrator and other staff on the administrative aspects and trained technique [2].

Data mining is the process of analyzing data from different perspectives and summarizing it into useful information. The main goal of data mining is to discover new patterns for the users and to interpret the data patterns to provide meaningful

and useful information for the users. Data mining is applied to find useful patterns to help in the important tasks of medical diagnosis and treatment [3].

In this paper we used a data mining tool WEKA which is very good when we are dealing with classification and clustering. Before using classification or clustering one should have to do the data preprocessing in the process of knowledge discovery. One of the challenges that face the knowledge discovery process in medical database is poor data quality. For this reason we tried to prepare data carefully to obtain accurate and correct results [4].

METHOD

For the awareness in the engineering student we have done a survey in computer science department (IIMT Engineering College, Meerut). The survey participants were third year and final year students of Computer Science & Engineering department of IIMT Engineering College.

99 students participated in this survey and the survey was taken with total number thirteen questions related to Eye Donation. The entire questions were multiple choices based on knowledge and awareness regarding eye donation.

In 99 participants 69 were male and 30 were female in which 63 males and 29 females belong to Hinduism and 6 male and 1 female belongs to Islam.

TABLE I : QUESTION RESPONSES BY THE STUDENTS

Question ask in survey		Response	percentage
Have you heard of eye donation?	Yes	93	93.94
	No	6	6.06
Eye donation can be done by removal of cornea	Yes	26	26.26
	Don't No	73	73.74
Eye Donation can be done within 6 hrs of Death	Yes	19	19.19
	Don't know	80	80.81
Is there any Age limit	Don't know	71	71.72
	No	28	28.28
All gender can donate eye	Yes	88	88.89
	Don't know	11	11.11
People already wearing spectacles can donate eye	Yes	26	26.26
	No	73	73.74
Do you aware of any eye bank/eye collection center in India?	Yes	27	27.27
	No	72	72.73
Are you willing to donate eye?	Yes	35	35.35
	Don't know	64	64.64

DISCUSSION

In our survey on the engineering students of computer science students, we have 99 students, 69 were male and 30 were female. There are two decision have been made one is those student who are not decided to donate eye and other is those student who are interested in donated eye. For visualize our result we have use WEKA tool [5].

First is age attribute we have students between 18 to 24 age ranges so the output is look like

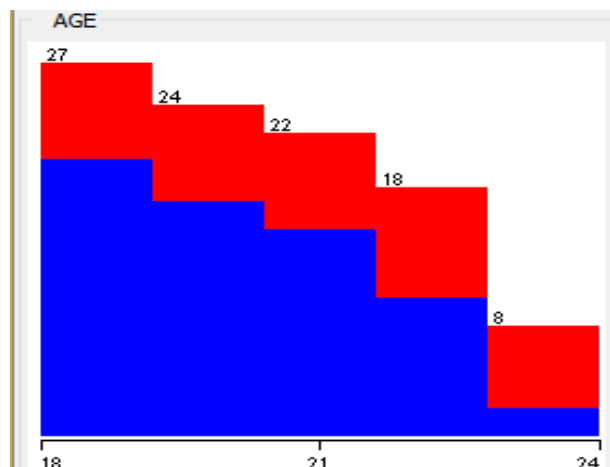


Fig 1 age visualize

In fig 1, Red color for willing to donate and Blue color for not decided to donate.

Second attribute is on the basis of sex (male or female)

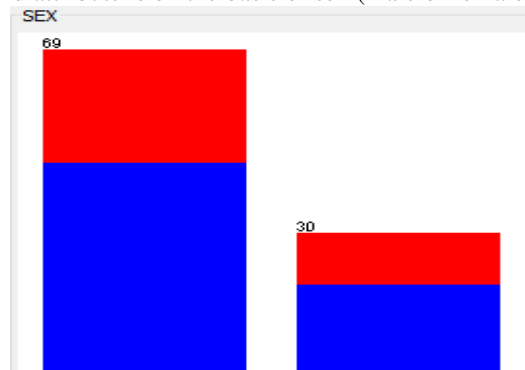


Fig2 sex (male/female) visualize

There are 69 male shown in fig 2 above and the red color show for willing to donate and blue color for not decided to eye donation, and there are 30 female shown in fig above and the red color show for willing to donate and blue color for not decided to eye donation.

Next attribute is on the basis of religion and the output is-

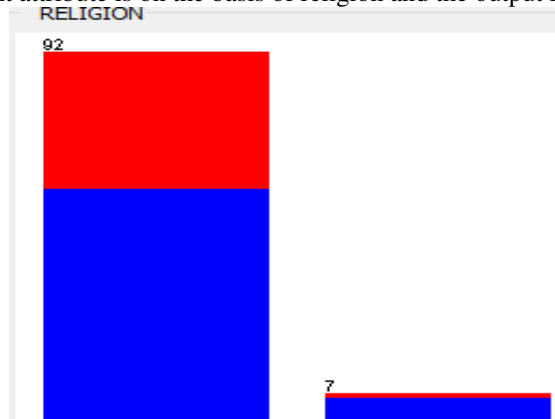


Fig 3 religion (Hindu or Islam)

In fig 3, There are 92 student belong to Hindu religion and 7 from Islam religion.(red color for willing to donate and blue color for not decided).

Next attribute is on the basis of awareness of eye donation the output is-



Fig 4 awareness

In fig 4 there are 77 students are aware about the eye donation and 22 students are not aware.

Next attribute is willing to donate eye and the output is-



Fig 5 willing to donate

In fig 5 there are 64 students are not interested in willing to donate means they not decided and 35 students are interested in eye donation. Blue color for not decided and red color for yes.

CONCLUSION

Eye donation awareness is a must for the purpose of minimize the number of blindness, for this purpose we have to spread information about the eye donation. For this new web application must be evolved by which one can understand that eye donation is a good work and he/she can easily get register for this , and we have to maintain some online camping for this because today’s life is so hectic and

people don’t have so much time to attend meeting in person regarding eye donation. Celebrity motivation video and some person who have decided to donate eye video must be online by which person get information and motivate their self .

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