



Original research

Awareness and knowledge on eye donation among Allied Health Sciences, medical, and nursing students in Goa

Barsha Lal^{a,b,*}, Ugam Usgaonkar^{a,b}, Harshada Narvekar^b, Dinesh Venugopal^{a,b}

^a Department of Ophthalmology, Goa Medical College and Hospital, Bambolim, Goa, India

^b Optometry Division, Allied Health Science Course, Department of Ophthalmology, Goa Medical College and Hospital, Bambolim, Goa, India

Received 25 October 2017; revised 1 February 2018; accepted 14 February 2018

Available online 7 March 2018

Abstract

Purpose: To assess the awareness and knowledge on eye donation among students of Allied Health Sciences (AHS), medical, and nursing.

Methods: A cross-sectional descriptive study was conducted using a standard predesigned and pretested closed-ended structured questionnaire based on eye donation to obtain information about awareness and knowledge from AHS, medical, and nursing students of Goa.

Results: Three hundred and forty participants participated in the study. The majority of the participants [97.9% (95% CI: 95.8–99.2)] were aware of the existence of eye donation. Mass media (62.9%) was the foremost source of information. However, only 145 [42.6% (95% CI: 37.3–48.1)] participants were willing to donate their eyes. AHS, medical, and nursing students stood apart significantly in their awareness and knowledge. Only 60 [17.6% (95% CI: 13.7–22.1)] participants were aware that the whole eye can be removed from the donor while 215 [63.2% (95% CI: 57.9–68.4)] were wrongly aware that the cornea can be removed separately. Awareness about eye donation was not associated with willingness to donate eyes.

Conclusions: Although awareness regarding eye donation was satisfactory, there was lack of willingness to donate eyes. There is a need to bridge the gap between eye bank and donors.

Copyright © 2018, Iranian Society of Ophthalmology. Production and hosting by Elsevier B.V. This is an open access article under the CC BY-NC-ND license (<http://creativecommons.org/licenses/by-nc-nd/4.0/>).

Keywords: Eye donation; Awareness; Knowledge; Corneal transplantation; Allied Health Science; Medical

Introduction

According to World Health Organization (WHO) estimates, every 5 s, someone goes blind.¹ There are currently about 45 million blind people in the world which increases by 1–2 million every year.² Damage to the cornea is the second most common cause of visual impairment and blindness which accounts for about 6–8 million of the total blind cases in the world.^{2,3} The majority of blinding corneal damage in the form

of trachoma affects 4.9 million individuals. Other major causes include ocular trauma, ulceration, xerophthalmia, ophthalmia neonatorum, onchocerciasis, leprosy, and use of traditional eye medicines.⁴

National Programme for Control of Blindness (NPCB) estimated that there are currently 120,000 corneal blind persons in India, and every year, there is an addition of 25,000–30,000 cases with corneal blindness.⁵ A major treatment option for restoring sight in those with corneal blindness is through corneal transplantation which can only be accomplished through cornea donation. Presently in India, the donor eye collection is around 22,000 eyes every year, which is insignificant with respect to the requirement.⁶ Therefore, collection of donor eyes is a priority in any organized effort to alleviate corneal blindness. The establishment of eye banks is implemental in the success of corneal transplants.

Financial disclosures: None.

Conflicts of interest: The authors have no conflicts of interest to declare.

* Corresponding author. Optometry Division, Allied Health Science Course, Department of Ophthalmology, Goa Medical College and Hospital, Bambolim, 403202, Goa, India

E-mail address: optometristbarsha@gmail.com (B. Lal).

Peer review under responsibility of the Iranian Society of Ophthalmology.

<https://doi.org/10.1016/j.joco.2018.02.002>

2452-2325/Copyright © 2018, Iranian Society of Ophthalmology. Production and hosting by Elsevier B.V. This is an open access article under the CC BY-NC-ND license (<http://creativecommons.org/licenses/by-nc-nd/4.0/>).

Progress in transplants and procuring the corneas in Goa is slow-moving. In the past eleven years, only 40 eyes have been secured for transplantation in Goa.⁷ Most of the corneas are obtained from road accident victims; however, the time lag between completing formalities and carrying out the autopsy make them unfit for transplantation. Various myths and lack of public awareness associated with eye donation may lead to low donation rates.^{8,9} Therefore, there is a pressing need to create awareness and raise the understanding among the public to come forward to pledge their eyes for donation. There is a paucity of studies on eye donation awareness in Goa.

This study was therefore designed to assess the awareness and knowledge among students of Allied Health Sciences (AHS), medical, and nursing course. These students were chosen because well-informed students can motivate the public for certain as they are the future health care providers. They spend considerable time with critically-ill patients and hence can play a major role in sensitizing them and their relatives to the important cause of eye donation. They can directly interact and counsel a large number of people, and hence influence eye donation rates.

Methods

A cross-sectional descriptive study was conducted in Goa between January to May 2017 among AHS, medical, and nursing students. AHS course comprises 5 streams: Bachelor of Physiotherapy (B.PT), Bachelor of Occupational therapy (B.OT), Bachelor of Optometry (B.OPT), Bachelor in Medical Imaging Technology (BSc.MIT), and Bachelor in Anaesthesia Technology (BSc.AT). 3rd and 4th year B.OPT and 4th and final year medical students were excluded from the study.

A total of 990 subjects (340 AHS, 450 medical, and 200 nursing) were present in the target population. Sample size was calculated based upon prevalence of willingness of donating eye reported by Bharti et al⁸ which was 27%. Willingness was preferred over awareness for sample size calculation because the target location was a medical institute, so it can be assumed that most of them would be aware of the existence of eye donation. With a precision of 5% and a significance level (α) of 5% (0.05), minimum calculated sample size was 303. Assuming a non-response rate of 50%, 495 subjects were enlisted using systematic random sampling strategy and were approached to fill the questionnaire and informed consent was obtained.

A standard predesigned and pretested closed-ended structured questionnaire was self-administered to them to assess their awareness and knowledge on eye donation. Participants were requested to respond to any one option for the questions given. The questionnaire was adapted from Bharti et al⁸ which contained questions on willingness, awareness, and knowledge about eye donation (Table 1). Questions no. 4–6 were comprised of awareness on eye donation reflecting the impact and efficacy of the public campaign on existence of eye donation. Questions no. 7–10 were comprised of knowledge on eye donation, emphasizing more technical

Table 1

Comparison between number of participants and total source population characteristics in terms of sex, field of study, and year of education.

		Total population	Participants, n (%)
Course	AHS	340	165 (48.5)
	Medical	450	90 (20.0)
	Nursing	200	85 (42.5)
Sex	Male	195	61 (31.3)
	Female	795	279 (35.5)
Year of education	First	330	74 (22.4)
	Second	325	123 (37.8)
	Third	275	118 (42.9)
	Final	60	25 (41.7)

AHS: Allied Health Science, n: Number of participants, %: Percentage of participants.

facts and details about eye donation. One can be familiar with the idea of eye donation but may not be well informed about the procedure.

To ascertain the construct for the current settings, psychometric reliability of the questionnaire was pretested in terms of internal consistency and test retest reliability. Items displayed moderate to substantial reliability with a Cronbach's α value of 0.77 and intra class correlation ranged within 0.57–0.82.

Data were analysed using the statistical package SPSS (IBM SPSS Statistics for Windows, Version 20.0. IBM Corp). Frequency and percentages were used for all categorical variables. Comparative statistical tests for significant intergroup differences were performed with the help of Chi-squared or Fisher exact test. During analysis, neutral responses like “undecided” or “don't know” were taken as a negative response for odds ratio calculation to rule out association.

Results

Three hundred and forty participants participated in the study. Overall response rate was 68.7% (340 subjects). However, the response rate differed among the three groups (97.7% AHS, 40.0% medical, and 85.0% nursing).

Comparison between participants and the source population characteristics in terms of sex, field of study, and year of education is shown in Table 1. The majority of participants were female (279, 82.1%). Response rate was 68.88% (279) among females and 67.77% (61) among males. Mean age was 19.54 ± 0.9 years.

Table 2 compiles information about awareness and knowledge of the participants about eye donation. Mass media (62.9%) was the foremost source of information regarding eye donation. Out of 340 participants, only 145 (42.6%) were willing to donate their eyes whereas only 70 (20.6%) were willing to donate their relative's eyes. 3rd year (44.0%) and final year (48.0%) participants were more inclined towards donating eyes.

Twenty-nine (8.6%) participants were not aware of whom to contact for eye donation. Most of the participants, 301 (88.8%), knew that an eye specialist/doctor/surgeon should be contacted for eye donation. The majority of the participants, 189 (55.6%), were aware of the existence of eye banks in Goa i.e. the Rotary Eye Bank.

Download English Version:

<https://daneshyari.com/en/article/8964628>

Download Persian Version:

<https://daneshyari.com/article/8964628>

[Daneshyari.com](https://daneshyari.com)