International Research Journal of MMC (IRJMMC)
ISSN 2717-4999 (Online) | 2717-4980 (Print)
Volume 6, Issue 1 | March 2025

Knowledge and Attitude Towards Eye Donation among Young Adults in Sainamaina Municipality

Susma Rana[1] | Shrijana Poudel[2]

[1]Student, Institute of Medicine
Pokhara Nursing Campus, Pokhara, Nepal

[2]Lecturer, Institute of Medicine
Pokhara Nursing Campus, Pokhara, Nepal

Corresponding Author
Shrijana Poudel
Email: shrijanabaral78@gmail.com

To Cite this article: Rana, S., & Poudel, S. (2025). Knowledge and attitude towards eye Ddnation among young adults in Sainamaina municipality. *International Research Journal of MMC, 6*(1), 203–218. https://doi.org/10.3126/irjmmc.v6i1.78088

Submitted: 6 March 2025 **Accepted:** 21 March 2025 **Published:** 31 March 2025

Abstract

Corneal transplantation is a very successful treatment for corneal blindness. However, the main problem is the lack of donor tissue. Young adults represent a potential donor pool. So, assessing their knowledge and attitude helps to aid in crafting targeted educational campaigns potentially increasing the number of future donors. This study is to assess the level of knowledge and attitude on eye donation among young adults in a ward of Sainamaina Municipality. A descriptive cross-sectional study conducted among young adults of age between 19 to 40 years in Sainamaina Municipality. Non-probability purposive sampling technique was used to collect data by interviewing the individual by using structured interview schedule. The collected data were entered, organized and coded in Statistical Package for Social Science (SPSS) and analyzed by using descriptive and inferential statistics. Out of 119 respondents, 46.2 percent belonged to the 30-39 age group with the mean age of 29 ± 6.38. Regarding the level of knowledge about eye donation, more than half of the respondents (54.6%) had a low level of knowledge and 45.4 percent had moderate level of knowledge. But 60.5 percent respondents had positive attitude toward eye donation and 39.5 percent had negative attitude. In terms of willingness to donate eye, only 21.8 percent of the respondents were willing to donate their eyes. The study highlighted that though respondents had positive attitude towards eye donation, they had poor knowledge and low willingness to donate their eyes. So, different educational campaigns, interactive workshops on eye donation to enhance their knowledge and in-depth qualitative studies are necessary to identify the reasons behind the discrepancy between attitude and willingness of

public on eye donation seems necessary. This study might help to enhance knowledge of eye donation in the community.

Keywords: attitude, community, eye donation, knowledge, young adults

1. Introduction

Corneal blindness is one of the avoidable blindness of the world which is affecting over 4.2 million people of the world. The majority of people with corneal blindness be present in low- and middle-income countries (World Health Organization [WHO], 2019). In South Asia, corneal opacity contributes 2.35 percent and 0.74 percent to blindness and moderate to severe has vision impairment among adults more than 50 years respectively (Flaxman et al., 2017). Similarly, in Nepal, 5.2 percent bilateral blindness is due to corneal scar (Nepal Netra Jyoti Sangh [NNJS], 2012).

The various infectious conditions progressively lead to corneal blindness. Similarly, one of the significant clinical treatment modalities is corneal transplantation (Tidke & Tidake, 2022) which can only achieved through cornea donation (Lal et al., 2018).

Corneal transplantation is a procedure to replace damaged corneal tissue, either entirely or partially, with healthy donor tissue. The type of corneal transplant will be determined by the extent of corneal damage and the amount of cornea that needs to be replaced(Singh et al., 2019).

The only way to obtain cornea is eye donation. Since donating one's eye after passing away is entirely voluntary. There is the massive need for the availability of transplantable donor corneas globally is only possible when young people are more aware and have positive attitude towards decision of donation of the eye during their life time (Pandey et al.,2022).

However, a study in Saudi Arabia found only 2.9 percent respondents had a good level of awareness, 40.9 percent had a satisfactory level and about 56.1 percent had a poor level of awareness on eye donation (Bugis et.al, 2018). Similarly study on the literate working population showed 90 percent had good awareness, only 25 percent were willing to donate an eye showing lack of awareness (Egnasious et al., 2018).So, despite the simplicity and significance of eye donation, the level of knowledge, attitude, people's willingness, personal and religious values deterred potential donors.

The research objective is to assess the knowledge and attitude on eye donation among young adults in a ward of Sainamaina Municipality Ward No 4.

Most of the studies (Ackuaku-Dogbe & Abaidoo (2014), Obasyui et al, (2022), Aftab et.al,2019, Panigrahi et al (2022). and so on) are carried out among people visiting Eye Clinics or Out-patient department or people from schools, colleges etc. with no specific age boundaries which may not fairly represent the community. However very limited studies are carried out both internationally and nationally on this topic. So, this study helps to identify the gaps in understanding and knowing the prevailing attitudes on eye donation among young adults of community.

2. Literature Review

A study to assess knowledge and attitude toward eye donation among 760 adults aged ≥18 years The findings showed that 8.4 % respondents had good knowledge and 59.9 % had favorable attitude (Hussen & Belete, 2018).Similarly, study among 536 patient age above 20 years attending Eye Clinic in Teaching Hospital of Ghana showed that among the respondents only 8.40 % were aware of eye donation while the one who knew the time for eye donation among them was only 17.80 %. However, 59.90% had willingness to donate their eyes (Ackuaku-Dogbe & Abaidoo, 2014).

Likewise, a study conducted among 134 senior secondary school teachers of age between 20 to 60 in a Rural Nigerian Community showed that 86.6% of the school teachers had poor knowledge on donation and 93% teachers had not willingness for donation of eyes before intervention. However, the number of teachers willing to donate their eyes was improved by 30 % and the teacher's knowledge was enhanced by 43.1 % (Obasyui et al, 2022).

However, a study conducted in Northern Jordan among randomly selected 500 community population aged ≥ 18 years showed a high level of awareness (88%) and willingness (67.2%) to donate their eyes (Haddad et al, 2018). A study on corneal donation among 500 students aged 18 to 25 that among 500 students, most students 73.2% answered 3 or fewer of the 7 questions on corneal donation suitably. Likewise, 31% stated willingness to donate their corneas, 22.2% stated unwillingness to donate corneas and 46.8% were confused and had not decided yet (Paraz et al., 2016).

A population based study in several cities of the Eastern province of Saudi Arabia showed poor knowledge about corneal donation as indicated by a mean knowledge score of 1.89 (out of 7) (Alibrahim & Jindan, 2020).

In an observational cross-sectional study of Saudi Arabia, the objective was to assess attitude, belief and awareness toward corneal donation depicted about 4.3% of the respondents had sufficient knowledge about corneal donation and higher level of awareness was associated with higher level of willingness on cornea donation as 40.2% of respondents said that if they knew enough about corneal donation, they would be more inclined to contribute(Alanazi et al., 2019).

A descriptive cross-sectional study found that 2.9% of the respondents had good, 40.9 percent had satisfactory and 56.1% had of poor level of awareness on eye donation (Bugis et.al, 2018). An observational descriptive study of Faisalabad showed that among 337 (67.4%) of the participants were aware of eye donation but only 76 (22.25%) were willing to donate the eyes after death (Aftab et.al, 2019). A study among urban population of Pakistan showed that 65.3% of the respondents had heard about eye donation but only 7.3% were found to be willing to donate eyes after dying (Parvez et.al, 2016).

A cross-sectional descriptive survey of Northern Odisha, India showed that 65% of the participant had knowledge of eye donation which was after death of the people, 55.4% were aware that perfect time to remove eye was less than 6 hours after death of the people. About 33% respondents had knowledge of donation of eyes, 48.6% knew that only cornea was the part of eye for eye donation (Panigrahi et al., 2022). A cross-sectional descriptive study of India 67.9% participant had knowledge that eyes can be donated and among them

156 (39.4%) agreed to donate their own eyes after their death. Of all, 251 (63.4%) were aware of consent of the family which is important for eye donation after death of the people and 172 (43.4%) reflected that they should go to eye hospital to donate eye. About the eye bank facilities about 86 (21.7%) had knowledge that it is present in their area. About, 86 (21.7%) believed that living person could donate their eye during their life and the cornea removed after their death. About 24 (6.1%) said that there was provision for payment for eye donation.(Chaudhary, 2022).The study in norther eastern showed that among 2500 ,2440 participants responded 61.4% were aware of ye donation but only 3.8% stated readiness to promise their eyes for donation (Marmamula et al., 2022).

A descriptive cross sectional that 34.28% had no knowledge of eye donation, 65.72% had either some or complete knowledge about donation of eye after death, only 7.78 % had excellent knowledge of eye donation while only 28% of population were willingness to donate eye (Singh et al., 2018).

A cross-sectional study during practice of department of community medicine showed that 75% of the residents were aware of eye donation, 51.6% had knowledge that eye donation should be done within 6 hour of death and 63.5% of them had willingness for eye donation (Prabhakar et al., 2019).

3. Materials and Methods

3.1 Research Design

A descriptive cross-sectional research design was adopted to assess the knowledge and attitude on eye donation among young adults in a ward of Sainamaina municipality**.**

3.2 Research setting

The study was conducted in Sainamaina Municipality ward no.4 of Rupandehi. It is located in Lumbini province. There are total 11 wards in Sainamaina Municipality, out of which ward 4 is purposively selected. Total area of this ward is 6.72 km^2. There are 2315 households and total population of 9271. Among them 4308 are male and 4963 are female.

3.3 Research Population

The population of this study were young adults with age group 19 to 40 years living in ward-4 of Sainamaina Municipality.

3.4 Sampling Technique

Non-probability purposive sampling technique was used in this study.

3.5 Sample Size

Sample size was calculated using Cochran's formula as:

Sample size: z^2pq/d^2

A study conducted in Northwest Ethiopia among 780 adults showed that good knowledge on eye donation was 8.4% (Hussen & Belete, 2018).

Prevalence (p): 8.4 %= 0.084

q=(1-p) = 0.916

z (reliability coefficient):1.96 at 95% confidence interval
d (allowable permissible error): 5%
so, sample size= z^2pq/d^2
$= (1.96)^2 \times 0.084 \times 0.916 / (0.05)^2$
$= 118.235$
$= 119$
So, sample size for study was 119.

3.6 Inclusion Criteria

One member aged between 19 and 40 years from each family, willing to participate wAs included in the study.

3.7 Research Instrument

Data were collected by the researcher using a structured interview schedule developed through literature review and consultation with research advisor and subject expertise. The instrument consisted of three sections:

Part I: It included 8 questions related to background information: age, sex, ethnicity, religion, education, occupation and family history of eye donation and transplantation.

Part II: It included 18 questions related to knowledge on eye donation. Correct response was scored '1' whereas incorrect response was scored '0'. For multiple response questions, score '1' was given for each correct response Total score was 21 which was converted in total of 100%. And as per modified bloom cutoff point, score 80% to 100% was regarded as good knowledge, score 50% to 79% as moderate knowledge and score less than 50% as poor knowledge (Hussen & Belete, 2018).

Part III: It consists of 3-point Likert Scale to measure the attitude on eye donation. It consists of 12 statements, 5 positives and 7 negatives. For positive statement '3' marks was given to agree, '2' marks to neutral and '1' was given to disagree. The scoring system was reversed for the negative statement. The total possible score that can be obtained was 36. After that median was calculated. The obtained score was classified as good attitude if score ≥ median value and poor attitude if score < median value (Hussen & Belete, 2018).

Content validity of the instrument was maintained through extensive literature review, consultation with research advisor, and expertise in related field. Simple and understandable language was used for obtaining response from the respondents and direct leading questions was avoided. The instrument was developed in English language and translated into Nepali language. Then it was back translated into English version and compared with original version.

Pretesting of the instrument was done in 12 young adults (10% of the total sample) in Ramghat-12, Pokhara. Modification of questionnaire was not done.

3.8 Data Collection Procedure

Data was collected after receiving proposal approval from research committee of Tribhuvan University, Institute of Medicine Pokhara Nursing Campus. Formal letter for permission of data collection was received from Pokhara Nursing Campus which was submitted to ward no-4 office of Sainamaina Municipality for formal permission. The objectives, duration, process and time of data collection was explained to administrative offices. Then, the formal permission letter for data collection was obtained from ward no-4 office of Sainamaina Municipality. Data was collected through door-to-door survey by researcher.

Informed verbal and written consent were taken from each respondent. Privacy and confidentiality of the respondents were maintained by not disclosing their personal information and using findings for the study purpose only. Only one adult was selected from each household by lottery method.

3.9 Data Analysis Procedure

The collected data were checked for its completeness and accuracy. Then the data were organized, coded and entered in Statistical Package for Social Science (SPSS) and analyzed by using descriptive statistics and Inferential statistics (Chi-square test) to measure the association of level of knowledge with selected background variables.

Table 1: *Background Information of Respondents*

n = 119

Background variables	**Number**	**Percent**
Age (in years)		
<20	6	5.0
20-29	54	45.4
30-39	55	46.2
≥40	4	3.4
Mean ±SD (29±6.38); Range (19-40) years		
Sex		
Female	72	60.5
Male	47	39.5
Ethnicity of respondents		
Janajati	82	68.9
Brahmin / Chhetri	34	28.6
Dalit	3	2.5
Religion of respondents		
Hindu	114	95.8
Buddhist	5	4.2
Education		
Basic level	6	5.0
Secondary level	75	63.0
Higher level	38	32.0

Occupation		
Unemployed	20	16.8
Business	26	21.8
Homemaker	25	21.0
Labour	20	16.8
Service	19	16.0
Agriculture	9	7.6
Family history of eye donation	1	0.8
Family history of eye transplantation	1	0.8

Table 1 shows that 46.2 percent of the respondents were in 30-39 age group with mean age and standard deviation of 29±6.38. Among 119 respondents, 60.5 percent were female, 68.9 percent of the respondents were Janajati and most of them (95.8%) followed Hindu religion. Likewise, 21.8 percent of the respondents were engaged in business.

Table 2: *Sources of Information on Eye donation among Respondents*
n =119

Source of Information#	**Number**	**Percentage**
Internet	51	42.9
Television	47	39.5
Health personnel	17	14.3
Family members/ Friends/ Relatives	14	11.8
Radio	9	7.6
Newspaper	8	6.7
Books/School Teacher	4	3.4

 # Multiple response

Table 2 shows that internet was the source of information regarding eye donation for most of the respondents (42.9%) followed by television (39.5%), health personnel (14.3%), family/ friends / relatives (11.8%), radio (7.6%), newspaper (6.7%) and Book/ School Teacher (3.4%).

Table 3: *Willingness to Donate Eyes among Respondents*
n = 119

Variables	**Number**	**Percent**
Willing to donate eyes		
Yes	26	21.8
No	30	25.2
May be	47	39.5
Don't know	16	13.5
Reason for willingness# (n=26)		
It gives vision to other after death	21	17.6
Pleasure to help the blind	7	5.9
Noble cause	4	3.4

Inspiration	3	2.5
Know someone who has donated eyes	1	0.8
Know someone who has received eyes	1	0.8
Reason for unwillingness[#](n=30)		
No reason	16	13.4
Fear	5	4.2
Unsuitability due to health problem	4	3.4
Religious belief	2	1.7
Family objection	1	0.8

 # Multiple Response

Table 3 shows that 21.8 percent of the respondents were willing to donate their eyes. The feeling that our donated eyes can be beneficial to give vision to other was the reason for willingness to donate eyes for 17.6 percent of the respondents while 13.4 percent respondents had no reason for their unwillingness to donate their eyes.

Table 4: *Knowledge on Meaning and Eligibility of Eye Donation among Respondents*
n=199

Responses	**Number**	**Percent**
Meaning of eye donation	80	67.2
In eye donation, the donated part of eye is cornea	29	24.4
Eligibility for eye donation		
Eye can be donated in any age	39	32.8
Person with infectious disease cannot donate eyes	70	58.8
Glasses wearing person can donate eyes	38	32.0

© Correct Response

Table 4 shows responses on meaning and eligibility of eye donation of respondents. It reveals that 67.2 percent of the young adults answered the correct meaning of eye donation. About, 24.4 percent of the respondents stated cornea is the donated part of eye. Likewise, 32.8 percent of the respondents answered that there is no age limit for eye donation and 32 percent responded that person wearing prescribed glasses can also donate his eyes.

Table 5: *Knowledge on Time, Place and Usefulness of Eye Donation among Respondents*
n = 119

Response	**Number**	**Percent**
Time and place for eye donation		
The eyes should be removed		
Within 2 hours after death	28	23.5
Within 6 hours after death[©]	38	32.0

Anytime after death	10	8.4
Don't know	43	36.1
The time required for eye removal		
20-30 minutes©	13	10.9
One hour	15	12.6
Two hour	19	16.0
Don't know	72	60.5
Eye donation can be done in#		
House	7	5.9
Hospital	113	95.0
Mortuary	11	9.2
Usefulness of donated eye		
All blinds	69	58.0
Congenitally blind	13	10.9
Cornea related blindness©	31	26.1
Cataract blind	6	5.0
One donor can give sight to		
One blind person	63	53.0
Two blind person©	47	39.5
More than two blind person	1	0.8
Don't know	8	6.7

© *Correct Response # Multiple Response*

Table 5 shows responses on time and place and usefulness of eye donation among respondents. It reveals that 32 percent of the respondents answered that eyes should be removed within 6 hours of death. Most (95%) of the respondents answered that hospital was the best place for eye donation. About 26.1 percent of the respondents stated that donated eyes are useful for cornea related blindness. Similarly, 39.5 percent responded that one donor can give sight to two blind person.

Table 6: *Knowledge on Preservation, Consent and Misconceptions of Eye Donation among Respondents*

Response	**Number**	**Percent**
Donated eyes can be preserved	76	63.9
Consent is needed for eye donation	106	89.1
Consent can be given by		
The person himself before death	105	88.2
His family members	46	38.7
Misconceptions		
Eye donation cannot deform face	91	76.5

Relatives of donor do not get money for eye donation	74	62.2
Recipient must not pay for the donated eyes	73	61.3
Identity of donor is not revealed to the recipient	49	41.2
Blood matching is not required for corneal transplantation	54	45.4

**Multiple Response*

Table 6 shows responses on preservation, consent and misconceptions of eye donation among respondents. It reveals that 63.9 percent of the respondents had knowledge that donated eyes can be preserved. Regarding consent, 89.1 percent of the respondents stated that consent is required for eye donation, yet only 38.7 percent responded that consent can also be given by his family members. Most (76.5%) of the respondents answered that eye donation does not deform face and 41.2 percent responded that identity of donor is not revealed to the recipient.

Table 7: *Attitude towards Eye Donation among Respondents*

Statements	**Agree No. (%)**	**Neutral No. (%)**	**Disagree No. (%)**
Positive statements			
Eye donation is noble work and totally voluntary	114(95.8)	4(3.4)	1(8.0)
Donated eyes can give vision to blind people	110(92.4)	5(4.2)	4(3.4)
Person wearing spectacles or glasses can donate eyes	56(47.1)	24(20.2)	39(32.8)
Open to discussing eye donation with my family and loved ones to ensure my wishes are known	105(88.2)	9(7.6)	5(4.2)
Knowledge and awareness regarding eye donation are important	118(99.2)	1(0.8)	0(0)
Negative statements			
Whole eye is removed from the donor	36(30.3)	46(38.7)	37(31.1)
Removing eye causes disfigurement on face	10(8.4)	28(23.5)	81(68.1)
The donated eyes can be bought and sold	29(24.4)	20(16.8)	70(58.8)
Donated eyes could be misused	57(47.9)	17(14.3)	45(37.8)
Donation of eyes lead to blindness in the next birth	4(3.4)	11(9.2)	104(87.4)
Eye donation goes against my personal or cultural beliefs	8(6.7)	7(5.9)	104(87.4)
Uncomfortable with the idea of donating my eyes after death	18(15.1)	7(5.9)	94(79.0)

Table 7 illustrates that almost all of the respondents (95.8%) agreed that eye donation is noble work and voluntary and almost all of the respondents (92.4%) also agreed that

donated eyes can give vision to blind people. However, 38.7 percent of the respondents expressed neutrality regarding the removal of the entire eye from the donor, and a similar percentage (37.8%) disagreed with the notion that donated eyes could be misused.

Table 8: Level of Knowledge and Attitude on Eye Donation among Respondents
n = 119

Level of Knowledge and Attitude	Number	Percent
Level of Knowledge		
Low knowledge	65	54.6
Moderate knowledge	54	45.4
Median: 10, Min score: 1 and Max score: 15		
Attitude		
Good attitude	72	60.5
Poor attitude	47	39.5
Median: 31, Min score: 24 and Max score: 36		

Table 8 depicts that more than half (54.6%) of the respondents had low level of knowledge and 45.4 percent had moderate level of knowledge. Regarding attitude majority (60.5%) of the respondents had good attitude while 39.5 percent had poor attitude.

4. Discussion

This study showed that the mean age and standard deviation of respondents was 29±6.38 years. The findings of the study indicated that 60.5 percent of the respondents were female, 68.9 percent were Janajati and most of them (95.8%) followed Hindu religion. Similarly, 21.8 percent of the respondents were engaged in business. Educational status, 63 percent respondents had completed secondary level. Likewise, 0.8 percent of the respondents had family history of eye donation and transplantation. Similarly, 21.8 percent of the respondents were willing to donate their eyes. The feeling that our donated eyes can be beneficial to give vision to other was some reason for willingness to donate their eyes for 17.6 percent of the respondents while 13.4 percent respondents had no reason for their unwillingness to donate their eyes.

In this study, the findings highlighted that 54.6 percent of the respondents had low knowledge and 45.4 percent had moderate knowledge. This finding has similar findings to the study conducted in Saudi Arabia where (Bugis et.al, 2018). But this finding differs from the study conducted in Northwest Ethiopia which showed that 59.4 percent of the respondents had moderate knowledge, 32.2 percent had low knowledge and only 8.4 percent had good knowledge (Hussen & Belete, 2018). The differences might be due to difference in educational status of the respondents. Similar finding was also found in the study conducted among students of Kathmandu University where 61.5 percent had moderate knowledge, 34.6 percent had poor knowledge and only 3.9 percent had good knowledge (Maharjan et al, 2021). The findings showed that majority (67.2%) knew that eye donation was donation of eyes after death of the person which is as similar as the studies conducted by Spoorthy &

Prasad, (2022), Maharjan et al, (2021) and Bellad and Hukkeri, (2019) which showed 75.25%, 77.1% and 75.47% stated that eye donation was done one after death respectively.
Less than one-third (24.4%) of the respondents in this study had knowledge about removal of cornea from the donor eye which is similar with the study done in Saudi Arabia (Bugis et.al, 2018). However, this results contradicts with the study done in Singapore which revealed that majority (72.2%) of the respondents were aware about removal of cornea (Paraz et al., 2016). This difference might be due to difference in age group of study population.

In this study, only 31.9 percent of them knew that eyes should be removed less than 6 hours after the death. This finding is quite less in comparison with that of the study done in Northern Odisha, India which revealed that 55.4 percent of the respondents said that best time to remove eyes is less than 6 hours of death (Panigrahi et al., 2022).

Regarding age limit for eye donation, the findings of the study revealed that 32.8 percent of the respondents were aware about eye donation which is inconsistent with the finding of the study done among students of Kathmandu University as 94 percent of the respondents answered that there was no limit of age for eye donation (Maharjan et al, 2021). This study showed that only 31.9 percent of the respondents stated that person wearing prescribed glasses can also donate eyes which was similar to the study conducted in Northern Odisha, India where 33.0 percent of the respondents stated that person bearing spectacles could donate eyes (Panigrahi et al., 2022).

More than half (58.8%) of respondents in this study knew that person with infectious disease cannot donate their eyes which was a bit higher than the finding of the study conducted in Northern Odisha respondents stated persons with septicemia, hepatitis B, Rabies,HIV positive , cannot donate eyes (Panigrahi et al., 2022).
Regarding the place for eye donation, in the present study, 95 percent of them knew that eye could could be donated in hospital while only 9.2 percent and 5.9 percent knew that eye could also be donated in mortuary and house respectively. This finding is consistent with study conducted among students of Kathmandu University in which 99 percent of them said that eyes could be donated in hospital while 19 percent and 14 percent responded that eyes could be donated in mortuary and house respectively (Maharjan et al, 2021).

The current study revealed that majority (89.1%) of the respondents didn't know that only 20-30 minutes time is required for eye removal which is supported by the finding of the study conducted in Singapore which (Paraz et al., 2016).

Lack of knowledge on usefulness of donated eyes was found obvious in this study as only 26.1 percent knew that they were were only useful for cornea related blindness. This finding is quite less from the study conducted from students of Kathmandu University as nearly half of them (46.3%) responded that eye donation can benefit to only corneal blind (Maharjan et al, 2021). This study showed that only one -third (39.5%) of the respondents were aware that two blind persons are benefitted by one donor which was concordance with the finding of the study done in Belagavi, India (Bellad & Hukkeri, 2019).

In this study, 76.5 percent knew that eye donation doesn't deform face. This finding is closely related with the study conducted in Singapore in which 74 percent of the respondents disagreed on the statement about change on facial appearance after corneal recovery (Paraz et al., 2016).

Majority (62.2%) of the respondents in this study were aware that relatives of donor don't get any money for eye donation, 61.3 percent were aware that recipient doesn't have to pay for the donated eyes and among the respondents (41.2%) were aware that identity of donor isn't revealed to the recipient. In terms of consent, 88.2 percent of respondents were aware that it is required for eye donation; however, only 38.7 percent were aware that family members can also grant consent.

This study revealed that majority of the respondents (60.5%) had good attitude and 39.5 percent had poor attitude this was supported by the study among students of Kathmandu University which revealed 65.9 percent of the respondents had good attitude and 34 percent had poor attitude (Maharjan et al, 2021). The finding is also nearly similar to the study conducted in Northwest Ethiopia which showed that 59.9 percent had good attitude and 40.1 percent had poor attitude (Hussen & Belete, 2018). There was no significant association between level of knowledge with selected background variables. But this finding is contrasting to the study conducted in Eastern province of Saudi Arabia where association was found between knowledge and age (p<0.016) (Alibrahim & Jindan, 2020).

5. Conclusion and Recommendation

This study concluded that more than half of the respondents exhibited a low level of knowledge regarding eye donation but good attitude towards eye donation. However, in terms of willingness, less than one third of the respondents were willing to donate their eyes. There was no significant association found between the level of knowledge and selected background variables. Although they have good attitude, knowledge is poor especially in terms of donated part, eligibility and usefulness of eye donation which underscores the need for focused interventions. To bridge this knowledge gap, administrative authorities can plan targeted educational campaigns in schools, colleges, and community centers and interactive workshops where young adults can learn about eye donation firsthand from healthcare professionals.

The study might help in sensitizing the respondents towards eye donation. The findings of this study will provide a baseline data and information for further research. The study findings will be disseminated to the administrative authority of ward-4 of Sainamaina municipality which will be helpful in planning awareness program on eye donation.

The researcher recommends to conduct educational campaigns, organize interactive workshops, utilize social media for outreach to enhance knowledge on eye donation and to encourage peer-to-peer influence and collaborate with youth organizations to amplify the message. Further, in-depth qualitative studies can be conducted to identify the reasons behind the discrepancy between attitude and willingness of public on eye donation.

6. Acknowledgements

It is a great pleasure to express my sincere thanks and gratefulness to all those supporting hands that have contributed directly or indirectly for the preparation of this research report.

First and foremost, researcher would like to express her sincere thanks and gratitude to Tribhuvan University, Institute of Medicine, Pokhara Nursing Campus for providing

opportunity to conduct this research study, Researcher also extends her heartful gratitude to Himalaya Eye Hospital for validating research instrument. Also, special appreciation goes to respected chairperson Ram Prasad Adhikari of ward office- 4 of Sainamaina Municipality for providing area to conduct research and all the participants of the study for their cooperation in this study.

References

1. Ackuaku-Dogbe, E. M., & Abaidoo, B. (2014). Eye donation: awareness and willingness among patients attending a tertiary eye center in Ghana. West Afr J Med, 33(4), 258-263.
2. Aftab, M. Z., Ejaz, M. S., Hassan, T., Sarfraz, M. A., Rehman, S. U., Ahmad, M., & Yousaf, R. A. (2019). knowledge, attitude and practices regarding eye donation among general public of faisalabad, pakistan. *Annals of Punjab Medical College (APMC)*, *13*(2), 133-137. https://doi.org/10.29054/apmc/2019.70
3. Alanazi, L. F., Aldossari, S. H., Gogandy, M. A., Althubaiti, G. A., Alanazi, B. F., & Alfawaz, A. M. (2019). Attitude, beliefs and awareness towards corneal donation in Saudi Arabia. *Saudi Journal of Ophthalmology*, *33*(2), 121–129. https://doi.org/10.1016/j.sjopt.2019.02.003
4. Alibrahim, E., & Jindan, M. (2020). Knowledge and attitude about corneal donation and transplantation in Eastern province: A population-based study. *International Journal of Medicine in Developing Countries*, 409–416. https://doi.org/10.24911/IJMDC.51-1576182666
5. Bellad, A., & Hukkeri, S. (2019). Knowledge and attitude regarding eye donation among the people of rural area in Kinaye, Belagavi: A cross sectional study. *International Journal Of Community Medicine And Public Health*, *6*(8), 3527. https://doi.org/10.18203/2394-6040.ijcmph20193482
6. Bugis, A., Ali, A., Almaghrabi, A., Alharbi, A., Fatani, Y., Alem, S., & Siddiqui, M. (2018). Knowledge and attitudes regarding eye donation and corneal transplants in saudi arabia: a cross-sectional study. *international journal of medical research Professionals*, *4(1),* 272-75. https://doi.org/10.21276/ijmrp.2018.4.1.055
7. Chaudhary, A. (2022). cross sectional study on awareness about eye banking in moradabad (india). *delhi journal of ophthalmology*, *32*(3). https://doi.org/10.7869/djo.738
8. Egnasious, J., Srinivasan, K., S Ve, R., & Noushad, B. (2018). Knowledge, awareness, perception, and willingness towards eye donation among the literate working population. *Asian Journal of Ophthalmology*, *16*(1), 7–18. https://doi.org/10.35119/asjoo.v16i1.336
9. Flaxman, S. R., Bourne, R. R. A., Resnikoff, S., Ackland, P., Braithwaite, T., Cicinelli, M. V., Das, A., Jonas, J. B., Keeffe, J., Kempen, J. H., Leasher, J., Limburg, H., Naidoo, K., Pesudovs, K., Silvester, A., Stevens, G. A., Tahhan, N., Wong, T. Y., Taylor, H. R., … Zheng, Y. (2017). Global causes of blindness and distance vision impairment 1990–2020: A systematic review and meta-analysis. *The Lancet Global Health*, *5*(12), e1221–e1234. https://doi.org/10.1016/S2214-109X(17)30393-5

10. Gain, P., Jullienne, R., He, Z., Aldossary, M., Acquart, S., Cognasse, F., & Thuret, G. (2016). Global survey of corneal transplantation and eye banking. *jama ophthalmology*, *134*(2), 167. https://doi.org/10.1001/jamaophthalmol.2015.4776
11. Haddad, M. F., Khabour, O. F., Alzoubi, K. H., & Bakkar, M. M. (2018). Public attitudes toward corneal donation in northern Jordan. *Clinical Ophthalmology*, 1973-1980
12. Gupta, S., Kole, S., Bhattacharya, S., & Guchhait, D. (2020). Perception and willingness towards eye donation in an urban community of west bengal. *nepalese journal of ophthalmology: a biannual peer-reviewed academic journal of the nepal ophthalmic society: nepjoph*, *12*(24), 290–297. https://doi.org/10.3126/nepjoph.v12i2.28426
13. Hussen, M., & Belete, G. (2018). Knowledge and attitude toward eye donation among adults, Northwest Ethiopia: A community-based, cross-sectional study. *Middle East African Journal of Ophthalmology*, *25*(3), 126. https://doi.org/10.4103/meajo.MEAJO_267_16
14. Kaur, M., Singh, A., & Singh, A. (2017). Awareness towards eye donation among general population: A cross-sectional study from rural Haryana. *Journal of Integrated Health Sciences*, *5*(2), 25. https://doi.org/10.4103/2347-6486.240241
15. Lal, B., Usgaonkar, U., Narvekar, H., & Venugopal, D. (2018). Awareness and knowledge on eye donation among allied health sciences, medical, and nursing students in goa. *journal of current ophthalmology*, *30*(3), 255–262. https://doi.org/10.1016/j.joco.2018.02.002
16. Marmamula, S., Priya, R., Varada, R., & Keeffe, J. E. (2022). Awareness on eye donation in the north-eastern state of tripura, india – the tripura eye survey. *ophthalmic epidemiology*, *29*(4), 460–464. https://doi.org/10.1080/09286586.2021.1953537
17. Maharjan, R. K., Bajracharya, N., & Awale, S. (2021). Knowledge and attitude regarding eye donation among students of kathmandu university school of management; a cross-sectional online survey. *international journal of health sciences and research*, *11*(5), 313-22.
18. Nepal Netra Jyoti Sangh. (2012). *The Epidemiology of blindness in Nepal*. Kathmandu: Author
19. Obasuyi, O. C., Edema, O., & Enock, M. (2022). Knowledge of and willingness towards cornea donation among senior secondary school teachers in a rural nigerian community. *Asian journal of research and reports in ophthalmology*, *5*(3), 10-16. https://doi.org/10.52403/ijhsr.20210549
20. Pallerla, S. R., Khanna, R. C., Krishnaiah, S., & Keeffe, J. (2022). Eye donation: Awareness, knowledge and willingness among general public in Southern Indian population. *International Journal Of Community Medicine And Public Health*, *9*(6), 2474. https://doi.org/10.18203/2394-6040.ijcmph20221523
21. Panigrahi, S., Pati, S., Patra, S., Mahapatra, B., Baskey, S., & Sahu, R. (2022). Knowledge, attitude, practice pattern and willingness for eye donation among tribal population of Northern Odisha. *International Journal of Health Sciences*, 2366–2375. https://doi.org/10.53730/ijhs.v6nS3.6036

22. Paraz, C. M. A., Truong, H. T. T., Sai, D. K., Cajucom-Uy, H. Y., Chan, C. L. L., & Kassim, S. M. (2016). Knowledge and attitudes toward corneal donation among Singaporean youth: A cross-sectional study. *Eye and Vision*, *3*(1), 17. https://doi.org/10.1186/s40662-016-0049-3
23. Patil, R. (2015). status of eye donation awareness and its associated factors among adults in rural pondicherry. *JOURNAL OF CLINICAL AND DIAGNOSTIC RESEARCH*. https://doi.org/10.7860/JCDR/2015/9157.5509
24. Prabhakar, A., Yadav, S., Gupta, S., & Mishra, P. (2019). Attitude toward eye donation—A population-based study from Western Uttar Pradesh. *International Journal of Medical Science and Public Health*, *0*, 1. https://doi.org/10.5455/ijmsph.2019.01011717012019
25. Prasad, R. V. (2022). Awareness and attitude towards eye donation among rural population. *Indian Journal of Clinical and Experimental Ophthalmology*, *8*(2), 259–264. https://doi.org/10.18231/j.ijceo.2022.052
26. Singh, A., Gupta, N., Ganger, A., Vashist, P., & Tandon, R. (2018). Awareness regarding eye donation in an urban slum population: a community-based survey. *experimental and clinical transplantation: official journal of the middle east society for organ transplantation*, *16*(6), 730–735. https://doi.org/10.6002/ect.2017.0077
27. Singh, R., Gupta, N., Vanathi, M., & Tandon, R. (2019). Corneal transplantation in the modern era. *Indian Journal of Medical Research*, *150*(1), 7. https://doi.org/10.4103/ijmr.IJMR_141_19
28. World Health Organization. (2019). *World report on vision*. World Health Organization. https://iris.who.int/handle/10665/328717