Original Research Paper

Public Health

AWARENESS REGARDING ORGAN DONATION AMONG YOUNG ADULTS OF UTTARAKHAND.

Tanuja Rawat	Nursing students, Himalayan College of Nursing, Swami Rama Himalayan University, Uttarakhand, India.
Ayush Kandiyal	Nursing students, Himalayan College of Nursing, Swami Rama Himalayan University, Uttarakhand, India.
Enosh Allwin	Nursing students, Himalayan College of Nursing, Swami Rama Himalayan University, Uttarakhand, India.
Kajal	Nursing students, Himalayan College of Nursing, Swami Rama Himalayan University, Uttarakhand, India.
Rekha Rana	Nursing students, Himalayan College of Nursing, Swami Rama Himalayan University, Uttarakhand, India.
Shivani Butola Nursing students, Himalayan College of Nursing, Swami Rama H University, Uttarakhand, India.	
Mr. Chandan Kumar*	Nursing Tutor, Himalayan College of Nursing, Swami Rama Himalayan University, Uttarakhand, India. *Corresponding Author
Mrs. Sonia Rawat	Nursing Tutor, Himalayan College of Nursing, Swami Rama Himalayan University, Uttarakhand, India.

ABSTRACT

Background: Organ donation is defined as giving an organ or part of an organ to be transplanted into another person. Organ transplantation is the only option to save lives in patients affected by terminal organ failure and improves their quality of life1. Objective-To asses knowledge regarding organ donation among young adults of Uttarakhand. Methods: A descriptive cross sectional study was conducted to assess knowledge regarding Organ Donation among young adults of Uttarakhand. Research was conducted among 50 young adults of Doiwala Block of Uttarakhand who were selected using systematic random sampling technique. Data was collected through self administered structured knowledge questionnaire. Results: 4% sample had good knowledge, 88% had average knowledge and 8% had poor knowledge regarding organ donation. There was significant association between knowledge score and gender of the participants. Conclusion: There is a need for educational programs to create awareness and improve knowledge regarding organ donation among public to fill the gap between need of organ and donor.

KEYWORDS: Knowledge, Organ Donation, Uttarakhand.

INTRODUCTION

Organ transplantation is one of the major lifesaving treatment for patients with end-stage organ failure. Despite of high technology in medical science, there is a shortage of organs which lead to a gap between the demand for organs and the number of donors. The need for organs is perpetually growing, but there is still a big gap between patients in need and donors, which is a source of major concern². There are limited number of studies on the organ donation therefore the public knowledge must be assessed to understand the reason behind gap between organ demand and donation.

Methodology

The study is a descriptive cross-sectional survey carried out among young adults of JollyGrant village of Uttarakhand in July 2022. A total of 50 young adults who were in the age group of 18-25 years were selected through systematic randomized sampling technique.

The tool included sociodemographic profile of the samples and self structured questions related to knowledge regarding organ donation. Validity of the tool was established by experts in the field of Nursing and Medical science. Reliability of the tool was established by split half method and r value obtained was 0.8 (Cronbach's alpha).

The tool was translated to Hindi language with the help of expert. Pretesting was done on 10 samples. Written consent was taken from each sample before data collection. Data was

collected by administering the self structured questionnaire. Data analysis was done using descriptive and inferential statistics.

RESULTS:

 $Sociode mographic \, characteristics \, of \, the \, study \, participants$

Table no.1: Socio-demographic characteristics of the study participants. N=50

S.No.	Demographic variable	Frequency	Percentage (%)
1.	Age in years:	16	32%
	• 18-21 • 22-25	34	68%
2.	Gender • Male	23 27	46%
	Female	27	54%
3.	Education	12	24%
	High school	21	42%
	Intermediate	17	34%
	Graduation and Above		
4.	Occupation	12	24%
	Unemployed	15	30%
	Employed	23	46%
	Student		
5.	Marital Status	16	32%
	Married	34	68%
	Unmarried		

6.	Previously heard of Organ Donation	50	100%
	• Yes		

As depicted in table no. 1, the study enrolled 50 young adults. There were 27 (54%) females and 23 (46%) males. Majority (68%) were in the age group of 22-25 years. Among these 16 (32%) were married. 17 (34%) were graduate and above, 21 (42%) were intermediate and 12 (24%) were high school passed. Of these 12 (24%) were were unemployed, 15 (30%) were employed and 23 (46%) were students. All the participants 50 (100%) had heard about organ donation.

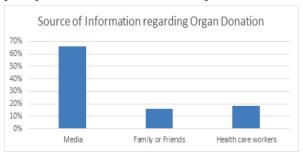


Figure no. 1: Source of information regarding organ donation.

Knowledge regarding Organ Donation Table 2: Mean, Standard Deviation, Median, Range of knowledge score regarding Organ Donation N=50

variables	Maximum	Range of	median	Mean	Mean %
	score	score		+ SD	
		(min/max)			
Knowledge	18	4-18	10	9.16+	50.5%
scores				4.046	

The total score of the knowledge questionnaire was 23.The lowest range of scores was 4 and the highest range of score was 18.The Mean and Standard Deviation of knowledge score was 9.16 & 4.046 Mean percentage for the knowledge score was 50.5%.

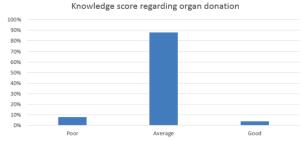


Figure no.2: Knowledge score of young adults regarding organ donation

Among 50 young adults, 4% had good knowledge, 88% had average knowledge and 8% had poor knowledge regarding organ donation.

Knowledge regarding organs that can be donated

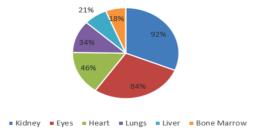


Figure no. 3: Knowledge regarding organs that can be donated.

Association of knowledge score with selected demographic variables.

Table No.3 Association of knowledge scores with their selected variables N=50

S.	Demographic	Below	Above	X2	P value
No.	variable	median <10	>10		
1.	Age in years			2.4239	0.119499
	• 18-21	6	12		
	• 22-25	18	14		
2.	Gender			5.265	0.021759*
	• Male	7	16		
	• Female	17	10		
5.	Education			2.1931	0.138632
	• Below	8	5		
	Intermediate				
	 Above 	14	23		
	Intermediate				
6.	Occupation			2.2263	0.135674
	 Employed 	9	6		
	 Unemployed 	13	22		
7.	Marital Status			1.433	0.231277
	 Married 	9	7		
	 Unmarried 	13	21		

df = 1; p = < 0.05

Significant association was found between knowledge score regarding organ donation and gender of the participants.

DISCUSSION

The study evaluated the knowledge of young adults regarding organ donation. The maximum score of the knowledge questionnaire was 18 and the range of score was between 4-18, median is 10, mean value is 9.16, standard deviation is 4.046 and the total mean percentage was 50.5%. The findings of the study revealed that 4% of the participants had good knowledge score, 88% had average knowledge score and 8% had poor knowledge regarding organ donation. The study outcome was supported by the cross-sectional study conducted by Melissa K. Hyde and Katherine M. White to examine young adults knowledge regarding organ donation. The study revealed that majority of the participants had average level of knowledge score regarding organ donation.

CONCLUSION

The study concluded that there are still some areas that needs to be improved regarding awareness of organ donation among general public. There is an immense need for educational programs to create more and more awareness and improve knowledge about organ donation as insufficient knowledge may be a biggest hurdle in it. Information regarding organ donation should be incorporated with clear messages in various mass medias as well.

Acknowledgement

The authors would like to thank the participants of the study.

Funding: No funding sources

Conflict of Interest: Nil

Ethical Approval: The study was approved by institutional ethical committee.

REFERENCES

- Sandeep Agrawal, Saud Binsaleem, Mohammed Al-Homrani, Abdullaziz Al-Juhayim, Abdullah Al-Harbi, Knowledge and attitude towards organ donation among adult population in Al-Kharj, Saudi Arabia, Saudi Journal of Kidney Disease and Transplantation, 2017 Jan-Feb;28(1):81-89. https://doi.org/10. 4103/1319-2442.198150
- Organ transplant in United State set 6th consecutive recording 2018.Organ procurement and transplantation network (2018)
- Hyde MK, White KM. Young Australian Adults' Knowledge and Beliefs about Organ Donation. Progress in Transplantation. 2007;17(3):220-227.doi:10.

- 1177/152692480701700310
 Beyar R. Challenges in organ transplantation. RMMJ 2011;2(2):e0049. doi:10.5041/RMMJ.10049
 Rudge c., Matesanz. R, delmonica F.L, chapan J. International practices of organ donation, British journal of anesthesia (2012); volume 108; page no.
- 148-155. https://doi.org/10.1093/bja/aer399
 Anderson, B. (2018). Assessment of knowledge and attitude regarding organ donation. Manipal Journal of Nursing and Health Sciences, 4(2), 6-10.