Article title: Organ donation: Knowledge regarding organ donation among students in Government degree college sanjauli Shimla Himachal Pradesh

Authors: Ruchi Sharma[1]

Affiliations: Nursing[1]

Orcid ids: 0000-0001-5367-2829[1]

Contact e-mail: ruchisharma3724@gmail.com

License information: This work has been published open access under Creative Commons Attribution License <http://creativecommons.org/licenses/by/4.0/>, which permits unrestricted use, distribution, and reproduction in any medium, provided the original work is properly cited. Conditions, terms of use and publishing policy can be found at <https://www.scienceopen.com/>.

Preprint statement: This article is a preprint and has not been peer-reviewed, under consideration and submitted to ScienceOpen Preprints for open peer review.

DOI: 10.14293/S2199-1006.1.SOR-.PPEZF7R.v1

Preprint first posted online: 17 January 2022

Keywords: Knowledge, Students, Structured teaching program, organ donation

Knowledge regarding Organ donation among students in Government Degree College Sanjauli, Shimla (H.P.)

Ms. Ruchi Sharma¹ and Dr. Shashi Kiran²

¹M.Sc. Nursing, Sister Nivedita Government Nursing College, IGM, Shimla, Himachal Pradesh, India

²Guide, Sister Nivedita Government Nursing College, IGM, Shimla, Himachal Pradesh, India

Abstract: **Introduction:** Organ donation is one of the finest therapeutic marvels of the 20th century which has saved the lives of several patients. The disparity between the enormous demands for the organs and their impoverished supply is the main concern. The total organ donation shortage in our country can be met even if only few victims involved in fatal accidents produce as organ donors. **Objectives:** To assess the existing knowledge regarding organ donation among students, to determine the effectiveness of structured teaching program on knowledge regarding organ donation among students, to find out association between post-test knowledge scores with their selected demographic variables. **Methodology:** A pre-experimental study was conducted among students in Government Degree College Sanjauli, Shimla (H.P.). Sample of 60 students were chosen using convenient sampling technique. Data was assembled using self-structured questionnaire related to organ donation. The gathered data was analyzed by using descriptive and inferential statistics. **Results:** The study findings unveil that 42 (70%) had poor knowledge, 18 (30%) had fair knowledge and none of them had good knowledge in pre-test. In post-test 2 (3.3%) had poor knowledge, 49 (81.7%) had fair knowledge and 9 (15%) had good knowledge. The study findings also revealed that there was a significant improvement in the post-test. The mean score of knowledge in pre-test was 17.30 and in post-test was 27.53 with 't' value 16.210 which was significant at 'p' <0.001. **Conclusion:** The study concluded that structured teaching program was effective in remodeling knowledge regarding organ donation among students.

Keywords: Structured teaching program, Organ donation, Knowledge and Students

INTRODUCTION

Organ donation is one of the greatest clinical marvels of the twentieth century which has stored the lives of numerous patients. The disparity between the large demands for the organs and their bad deliver is the primary difficulty. the entire organ donation shortage in our usa may be met although simplest few sufferers concerned in deadly injuries function organ donors. Organ donation and a hit retrieval of lifestyles saving organs is a complicated method involving co-ordination of more than one transplant groups.¹

Organ donation is a unique social activity that has direct have an effect on on the transport of healthcare to a extensive range of sufferers. Transplantation and its known healing benefits are not possible with out the cooperation and guide of healthcare specialists, government and society as a whole. Transplantation is the treatment of choice that improves lifestyles expectancy and pleasant of existence. The donation and transplantation gadget represents a complicated exercise and is depending on character attitudes, social systems, cultural practices and non secular beliefs.²

Organ donation is the process while someone lets in an organ in their own to be eliminated and transplanted to any other character, legally, either via consent even as the donor is alive or dead with the assent of the next of relations. Donation can be for research or, extra normally, healthful transplantable organs and tissues may be donated to be transplanted into every other person.³

OBJECTIVES OF THE STUDY

1. To assess the existing knowledge regarding organ donation among students in Government Degree College Sanjauli, Shimla (H.P.)
2. To determine the effectiveness of Structured Teaching Program on the knowledge regarding organ donation among students in Government Degree College Sanjauli, Shimla (H.P.)
3. To find out association between post-test knowledge scores with their selected demographic variables.

MATERIALS AND METHODS

Research approach: Quantitative approach

Research design: Pre-experimental one group pre-test post-test design

Setting of the study: Government Degree College, Sanjauli, Shimla, H.P.

Study population: Students of Government Degree College, Sanjauli, Shimla, H.P.

Sample size: 60 students

Sampling technique: Convenient sampling technique

Informed consent was taken from Students of Government Degree College and confidentiality of students was also maintained.

Inclusive criteria: Students who were studying in Government Degree College, Sanjauli, students who were willing to participate, students who were present at the time of study.

Exclusive criteria: Students who were not willing to participate, students who were not present at the time of study.

Development of tool: Knowledge related questionnaire (40)

Section A- Socio-demographic characteristics of the students (age, gender, stream, religion, type of family, education of father, education of mother, residential area, previous knowledge and source of information regarding organ donation). Section B- There were forty structured knowledge questionnaire having four options. Score of “one” for every right answer and “zero” for every wrong answer was given. The maximum score was 40 and minimum score was zero. Scoring was done on the basis of marks as <50% (<20)= Poor, 51-75% (21-30)= Average, >75% (31-40)= Good

Validity of tool- By the experts from different fields

Permission- Obtained from the Principal of the college.

Ethical consideration- Ethical approval was taken from Ethical committee of Sister Nivedita Government Nursing College, IGMCI, Shimla for conducting the study.

Data collection: Was done in the month of September 2021. Students were prorated into 2 groups (odd and even group). Pre-test and Structured teaching Program was given on same day and on 8th day post-test was taken.

Data analysis: With relevant statistical test in terms of frequencies, percentage, mean, standard deviation and Chi-square test.

RESULTS

Table 1: Socio- demographic variables of students

Variables	f	%
1. Age in years		
17-19	39	65
>19-21	21	35
>21-23	-	-
2. Gender		
Male	25	41.7
Female	35	58.3
3. Stream		
Medical	48	80
Non-medical	12	20
4. Religion		
Hindu	55	91.7
Muslim	-	-
Sikh	5	8.3
Others	-	-
5. Type of family		
Joint	19	31.7
Nuclear	41	68.3
6. Education of father		
No formal education	-	-
Primary-Middle	4	6.7

Matriculation- Senior secondary	31	51.7
Graduate- Postgraduate	20	33.3
Above Postgraduate	5	8.3
7. Education of mother		
No formal education	2	3.3
Primary-Middle	5	8.3
Matriculation- Senior secondary	36	60
Graduate- Postgraduate	17	28.3
Above Postgraduate	-	-
8. Residential area		
Rural	30	50
Urban	30	50
9. Previous knowledge regarding organ donation		
Yes	26	43.3
No	34	56.7
10. If Yes, Source of information		
Family members and friends	2	3.3
Mass media, newspaper	20	33.3
Health professionals	4	6.7
Attended Workshops, Seminars and Conferences	-	-

Table 1 depicts that with regard to age, majority 65% study subjects were in the age group of 17-19 years followed by 35% in the age group >19-21 years and none were in the age group >21-23 years, Majority 58.3% study subjects were females whereas 41.7% study subjects were males, 80% were from medical stream followed by 20% study subjects who were from non-medical stream, majority 91.7% were Hindu followed by 8.3% Sikhs and none were in the category of Muslim and others, majority of study subjects 68.3% were from nuclear family and 31.7% study subjects were from joint family, 51.7% were matriculation- senior secondary followed by 33.3% were graduate-postgraduate, 8.3% were above postgraduation, 6.7% were primary-middle and none were in the category of no formal education, 60% were matriculation-senior secondary, 28.3% were graduate-postgraduate, 8.3% were primary-

middle, 3.3% were having no formal education and none was in the category of above postgraduation, equal share of study subjects i.e. 50% from urban area and 50% from rural area, maximum number of study subjects 56.7% had no previous knowledge regarding organ donation whereas 43.3% had previous knowledge regarding organ donation. Analyzing the source of information, 33.3% study subjects had information from mass media and newspaper, 6.7% study subjects had information from health professionals, 3.3% study subjects had information from family friends and members whereas none had attended workshops, seminars and conferences.

Table 2: Knowledge score of students regarding organ donation

Level of knowledge	Knowledge score	Pre-test		Post-test	
		f	%	f	%
Poor	0-20 (<50%)	42	70	2	3.3
Average	21-30 (51-75%)	18	30	49	81.7
Good	31-40 (>75%)	0	0	9	15

Results revealed that in pre-test majority 70% subjects had poor knowledge, 30% had average knowledge and none had good knowledge whereas in post-test 3.3% subjects had poor knowledge, 81.7% had average knowledge and 15% had good knowledge regarding organ donation.

Table 3: Comparison of pre-test and post-test knowledge score regarding organ donation

Knowledge	Mean	S.D.	Mean difference	't' value	'p' value
Pre-test	17.30	3.815			
			10.233	16.210	0.001*
Post-test	27.53	4.208			

(*p <0.001 Significant)

Table 4: Association of pre-test knowledge scores of students with selected socio demographic variables.

Demographic variables	Level of knowledge	Association with knowledge scores
-----------------------	--------------------	-----------------------------------

	Poor	Average	Good	df	Chi square	‘t’ value	‘p’ value
1. Age in years							
17-19	31	8	-	1	0.17	0.45	0.681
>19-21	17	4	-				
>21-23	-	-	-				
2. Gender							
Male	21	4	-	1	0.429	2.71	0.531
Female	27	8	-				
3. Stream							
Medical	40	8	-	2	1.367	1.386	0.364
Non-medical	8	4	-				
4. Religion							
Hindu	45	10	-	2	2.614	4.605	0.825
Muslim	-	-	-				
Sikh	2	3	-				
Others	-	-	-				
5. Type of family							
Joint	16	3	-	1	0.308	0.45	0.579
Nuclear	32	9	-				
6. Education of father							
No formal education	-	-	-	4	2.692	7.77	0.611
Primary-Middle	4	-	-				
Matriculation- Senior secondary	24	7	-				
Graduate- Postgraduate	17	3	-				
Above Postgraduate	3	2	-				
7. Education of mother							
No formal education	2	-	-				

17-19	2	31	6				
>19-21	-	18	3	1	0.003	3.841	0.956
>21-23	-	-	-				

2. Gender

Male	1	21	3	1	2.242	3.841	0.134
Female	1	28	6				

3. Stream

Medical	2	40	6	1	4.344	3.841	0.037*
Non-medical	-	9	3				

4. Religion

Hindu	2	44	9				
Muslim	-	-	-	1	0.617	3.841	0.664
Sikh	-	5	-				
Others	-	-	-				

5. Type of family

Joint	1	15	3	1	0.184	3.841	0.668
Nuclear	1	34	6				

6. Education of father

No formal education	-	-	-				
Primary-Middle	-	2	2				
Matriculation- Senior secondary	1	24	6	3	0.228	7.815	0.970
Graduate- Postgraduate	1	18	1				
Above Postgraduate	-	5	-				

7. Education of mother

No formal education	-	1	1				
Primary-Middle	-	4	1				
Matriculation- Senior secondary	2	29	5	3	2.052	7.815	0.587
Graduate- Postgraduate	-	15	2				

Above Postgraduate	-	-	-				
8. Residential area							
Urban	1	25	4	1	2.443	3.841	0.118
Rural	1	24	5				
9. Previous knowledge regarding organ donation							
Yes	-	19	7	1	0.149	3.841	0.700
No	2	30	2				
10. If yes, source of information							
Family members and friends	-	1	1				
Mass media, newspaper	-	15	5				
Health professionals	-	3	1	3	2.082	7.815	0.716
Attended Workshops, Seminars and Conferences	-	-	-				

Table 5 depicts that there was a significant association between post-test knowledge demographic variable i.e. stream ($\chi^2= 4.344$) at 'p' <0.001 level and there was no significant association between post-test knowledge score and the selected demographic variables i.e. age, gender, religion, type of family, education of father, education of mother, residential area, previous knowledge regarding organ donation and source of information.

DISCUSSION

The pre-test mean $\pm$ SD was 17.30 $\pm$ 3.815 and in post-test mean $\pm$ SD was 27.53 $\pm$ 4.208. The mean post-test knowledge score 27.53 was higher than mean pre-test knowledge score 17.30. The mean difference was 10.23. The calculated 't' test value 16.210 was greater than the table value 2.00 at 'p' <0.001 level of significance. This also clearly shows that the STP on knowledge regarding organ donation had significant improvement in their level of knowledge in post-test.

Findings of the prevailing study were supported by the observed study findings of **Nirmala M, Leena J, Reena RCJ, Keerthana B, Sheeba SR, Jenifer GM, et al. (2019)** which showed that the pre-test mean $\pm$ SD was 8.47 $\pm$ 2.65 and in post-test mean $\pm$ SD was 9.89 $\pm$ 3.54. The mean post-test knowledge score 9.89 was higher than mean pre-test knowledge score 8.47. The mean difference was 1.42. The calculated 't' test value 4.4170 was greater than the table value 3.131 at 'p' <0.001 level of significance.⁴

CONCLUSION

The study concluded that the structured teaching program was effective in improving knowledge regarding organ donation among students.

RECOMMENDATIONS

1. A large-scale study can be carried out with distinct demographic characteristics to generalize the findings.
2. A comparative study can be carried out to discover effectiveness between structured teaching program and self-instructional module regarding organ donation.
3. A similar study can be conducted using another method of teaching.
4. Repetitive periodic educational sessions regarding organ donation must be carried to ensure that the public are aware about organ donation.

REFERENCES

1. Nallusamy S, Shyamalapriya, Balaji, Ranjan, Yogendran. Organ donation – Current Indian scenario. J Pract Cardiovasc Sci. 2018 ;4(3):177-9. Available from: <https://www.j-pcs.org/text.asp?2018/4/3/177/249941>
2. McGlade D, Pierscionek B. Can education alter attitudes, behaviour and knowledge about organ donation? A pretest-post-test study. BMJ Open. 2013 ;3(12): e003961. Available from Pub Med: <https://doi.org/10.1136/bmjopen-2013-003961>
3. Organ donation - Wikipedia. En.wikipedia.org. 2020 June 26. Available from: https://en.wikipedia.org/wiki/Organ_donation
4. Nirmala M, Leena J, Reena RCJ, Keerthana B, Sheeba SR, Jenifer GM, et al Effectiveness of structured teaching programme on knowledge and attitude regarding organ donation among young adults in selected college, Coimbatore, Journal of Scientific and Innovative Research . 2019;8(3):91-93. Available from: <https://www.jsir.journal.com>