

A descriptive study on the knowledge and attitude regarding organ donation among the junior college students in selected city

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Abstract:

“A descriptive study on the knowledge and attitude regarding organ donation among the junior college students in selected city”.

The Primary objective of the study

1. To assess knowledge regarding Organ Donation

2. To assess the attitudes regarding organ donation

Secondary objective

1. To find out the association between knowledge, attitude and demographic variables.

The present study, the concept from Pender's health promotion model is utilized where the student modifying factors which include Age, Sex, Academic Year, Living community, type of family, religion and residential place. The focus of the model is to explain the factors that influence the student regarding organ donation. The second factor of the model focuses on cognitive factors like Knowledge regarding organ donation that include General Meaning, Needs, Importance of organ donation, Policies and Awareness programme. A Descriptive research approach and Cross sectional research design was used. The sample size was 100 junior college student. Convenient Sampling technique method used. Questionnaires regarding information about organ donation was used to assess the knowledge level of the student regarding organ donation and attitude scale was used to assess the attitude towards the organ donation of the student. To find out the study findings mean and standard deviation used for assessing the knowledge level and 'chi square' test used for association between knowledge and attitude regarding organ donation with demographic variable. With the help of above findings it is concluded 52 students have average level of knowledge and there was also no association found between knowledge and demographic variables. There was positive attitude regarding organ donation among participants and there was an association found between attitude score and Age, Residential place, Religion and Parent education.

Introduction

Organ donation is yet to gain momentum in India. The knowledge and attitude of a society toward organ transplantation is far from satisfactory even among the educated sections of the society. The major concerns causing organ shortage in the country are lack of awareness and correct knowledge among public, myths and misconception clouding organ donation due to religious and cultural barriers, etc. Hence, imparting correct knowledge and awareness about the issue to the public is quintessential for the success of organ donation program in India¹.

India is struggling with an acute shortage of organs for transplantation. It is estimated that more than a million people suffer from end-stage organ failure, but only a handful of 3,500 transplants are performed annually. At least 15 patients die every day waiting for organs and every 10 minutes a new name is added to this waiting list. Undoubtedly, the demand far outstrips the availability of organs. And no one can escape the harsh reality¹⁰.

The main aim of the study was to assess the knowledge and attitude regarding organ donation among the junior college students with selected demographic variables.

Research design used for the study was cross sectional design. Data collection tool for present study consists of three sections, first was Demographic data, second was Knowledge questionnaires and third was Attitude scale. After preparation of a tool, content validity and reliability established.

Administrative permission was procured formally from the principal of Balasaheb Vikhe junior college and required subject was selected on the basis of convenient sampling techniques.

The investigator approached the subject, informed them regarding the purpose and objective of the study. Consent were obtained after assuring the subject about the confidentiality of the data. The subject consisted of 100 students with age group of 15,16,17,18 years by convenient sampling technique .Knowledge was assessed by questionnaires and attitude was assessed by checklist. The data was recorded through the information of demographic variables, knowledge questionnaires and attitude checklist. The data analyzed statistically. Interpretation was done based on the objectives for the study.

SECTION- I

Description of samples According to demographic data of student

Age: Maximum 55 (55%) samples who participated in the study were of 17 years of age, 18(18%) sample who participated in the study were of 18 years of age, only 2(2%) samples in age group of 15 years, 25(25%) sample in age group of 16 years

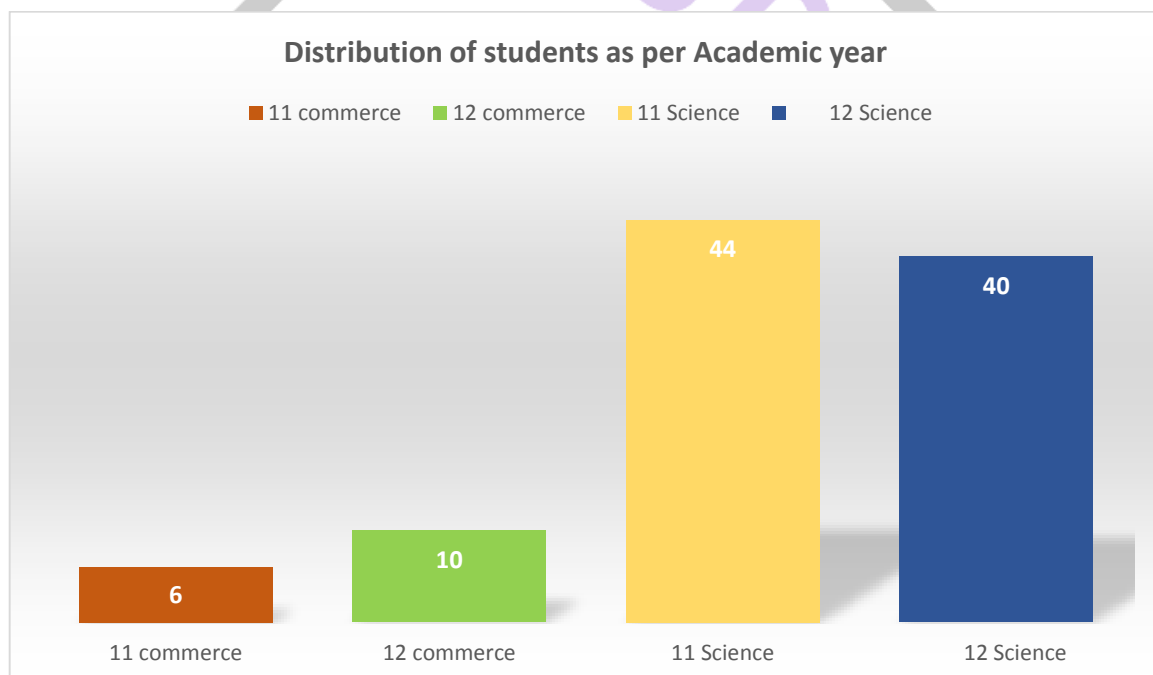
Table1: Distribution of students as per age

Sr. no	Age in Years	frequency	percentage
1	15	0	0%
2	16	20	20%
3	17	55	55%
4	18	25	25%

$N=100$

Gender: Among 100 samples there were 72 (72%) males and only 28(28%) samples were female.

Academic Year: Out of 100 samples 6 students are from 11th standard from commerce. 10 students participated from 12th commerce. But from 11th science maximum 44 students participated in research study and 40students were from 12th science.



Residential place: among 100 samples there were only (3%) students were staying in hostel and 97(97%) samples were day scholars.

Religion: Out of 100 samples 90 students are Hindu. There were only 4 Muslim students who participated in study and two students were Christian and others were only 4.

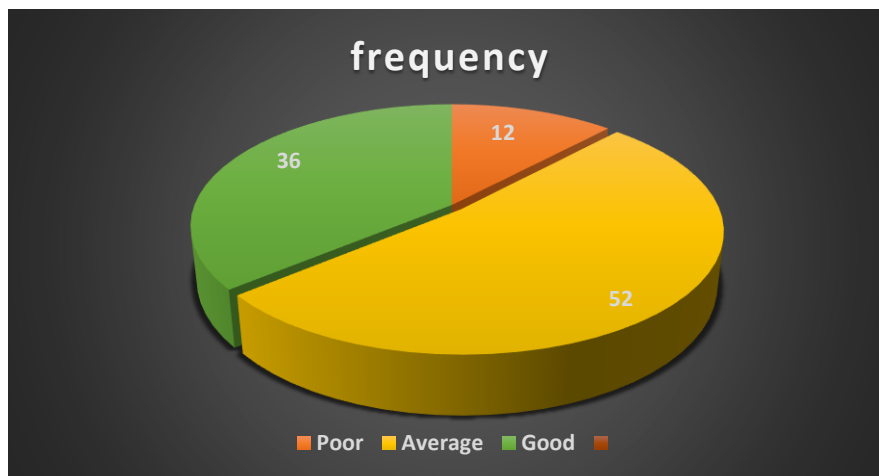
Parent Education: Among 100 samples 91 parents were literate and only 9(9%) parents of samples were illiterate.

Living community: Among 100 sample 66% of student are from urban area and 34% of student from rural area.

Type of Family: among 100 sample 55% of student belong from nuclear type of family and 45% of student belongs from joint type of family.

SECTION- II**Level of knowledge score of junior college students regarding organ donation:**

Out of 100 sample 36 student having a good knowledge about organ donation, 52 student having average knowledge about organ donation and 12 student having poor knowledge about organ donation

**Item wise assessment of knowledge score of junior college students regarding organ donation:**

Out of 100 sample 55% student know source of information regarding organ donation, 86% student know meaning of organ donation. 85% students know reason behind organ donation, 59% student know which organ can be donated. 51% student know who can donate organ, 62% student know the criteria to qualify as an ideal organ donor, 62% student know organ donation depends upon which basis, 57% student know when to donate an organ, 56% student know which disease limit organ donation, 55% know which organ mostly donated in India.

B Mean, variance and standard deviation of knowledge score of junior college students regarding organ donation

Table:8 Mean, variance and standard deviation of knowledge score of junior college students regarding organ donation

SR NO	knowledge score of junior college students regarding organ donation	MEAN	VARIANCE	STANDARD DEVIATION	MEDIAN
1		63.18	121.5204	11.02363	62

The above table shows knowledge score of junior college students regarding organ donation With mean of 63.18, and variance is 121.5204. The standard deviation as per calculation is 11.02 and median calculated is 62

SECTION III**Analysis of existing attitude of science and commerce student of Balasaheb vikhe junior college regarding organ donation****Level of attitude score of organ donation:**

1. Out of 100 sample 41 student are strongly agree to donate organ, 38 student are agree to donate organ, 12 student are neutral about organ donation, 5 student are disagree about organ donation and 4 strongly disagree to donate organ.
2. Out of 100 sample 49 student are strongly believe in organ donation, 42 student are believe in organ donation, 6 student are neutral about organ donation, 2 student are disagree about organ donation and 1 student is strongly disagree organ donation.
3. Out of 100 sample 8 student are strongly agree about disfigurement is cause of refusal of organ donation, 27 student are agree about disfigurement is cause of refusal of organ donation, 38 student are neutral about disfigurement is cause of refusal of organ donation, 23 student are disagree about disfigurement is cause of refusal of organ donation and 4 student are strongly disagree about disfigurement is cause of refusal of organ donation.
4. Out of 100 sample 14 student are strongly agree that Donated organ could be misused, abused or misappropriated, 36 student are agree that Donated organ could be misused, abused or misappropriated, 21 student are neutral that Donated organ could be misused, abused or misappropriated, 18 student are disagree that Donated organ could be misused, abused or misappropriated and 11 student are strongly disagree about Donated organ could be misused, abused or misappropriated.
5. Out of 100 sample 11 student are strongly agree about Organ should be donated only to family members, 9 student are agree about Organ should be donated only to family members, 20 student are neutral about Organ should be donated only to family members, 38 student are disagree about Organ should be donated only to family members and 22 student are strongly disagree about Organ should be donated only to family members.
6. Out of 100 sample 31 student are strongly agree about Health status is important factor of donar for recipient, 42 student are agree about Health status is important factor of donar for recipient, 10 student ate neutral about Health status is important factor of donar for recipient, 11 student are disagree about Health status is important factor of donar for recipient and 6 student are strongly disagree about Health status is important factor of donar for recipient.

7. Out of 100 sample 13 student are strongly agree about Religion of the recipient is needed for organ donation, 14 student are agree about Religion of the recipient is needed for organ donation, 15 student are neutral about Religion of the recipient is needed for organ donation, 20 student are disagree about Religion of the recipient is needed for organ donation and 38 student are strongly disagree about Religion of the recipient is needed for organ donation.

8. Out of 100 sample 15 student are strongly agree that Without families permission, donor can donate his organ 36 student are agree that without families permission, donor can donate his 13 student are disagree that Without families permission, donor can donate his organ and 13 student are strongly disagree about Without families permission, donor can donate his organ.

9. Out of 100 sample 15 student are strongly agree about there is risk for organ donation, 29 student are agree about there is risk for organ donation, 25 student are neutral about There is risk for organ donation 21 student are disagree about There is risk for organ donation and 10 student are strongly disagree about There is risk for organ donation.

10. Out of 100 sample 32 student are strongly agree to motivate to other for donate organ, 40 student are agree about Would you like to motivate to other for donate organ, 13 student are neutral to motivate to other for donate organ, 08 student are disagree to motivate to other for donate organ and 07 student are strongly disagree to motivate to other for donate organ.

11. Out of 100 sample 07 student are strongly agree to take a money for organ donation, 07 student are agree to take a money for organ donation, 21 student are neutral about to take a money for organ donation, 38 student are disagree about to take a money for organ donation and 27 student are strongly disagree about to take a money for organ donation.

12. Out of 100 sample 20 student are strongly agree about that every individual should automatically be registered as an organ donor, 34 student are agree about that every individual should automatically be registered as an organ donor, 20 student are neutral about Are you feel that every individual should automatically be registered as an organ donor, 10 student are disagree about Are you feel that every individual should automatically be registered as an organ donor and 16 student are strongly disagree about Are you feel that every individual should automatically be registered as an organ donor.

SECTION IV

Association between knowledge and attitude with socio demographic variables

A) Association between Knowledge with Demographic variable

There is Average level of knowledge found among the participants 100 (65%). There was no significance association found between level of knowledge in age ($P=0.3504$), Gender ($P=0.076$), Academic year ($P=0.143015$), Residential place ($P=0.24$), Religion ($P=0.96515$), Living community ($P=0.24$), and type of family ($p=0.170801$). But there was significant association between knowledge and parent education ($P=0.036$).

B) Association between Attitude Score with demographic variable

There was positive attitude regarding organ donation (92%). There was no association found between attitude score and Gender ($P=0.148493$), Academic year ($P=0.075602$), Living community ($P=0.4659$) and Type of family ($P=0.121337$). But there was an association found between attitude score and Age ($P=0.042863$), Residential place ($P=0.00001$), Religion ($P=0.000061$) and Parent education ($P=0.0206$).

It was proven that, no association found between demographic variable and knowledge of student regarding organ donation. Such as age, gender, academic year, residential place, religion and type of family. There was also association found between attitude score and organ donation. Such as age, residential place, religion and parent education

IMPLCATION

The implication of the study can be discussed in five board areas namely; clinical nursing practice, nursing education, nursing research and in community setting.

CLINICAL PRACTICE

Nursing practice includes planning of health education and awareness among critically ill patient and motivating them for organ donation. Nursing plays an important role in rendering supportive and educative care to all subjects.

This study provided evidence of need of health education and awareness of organ donation.

NURSING EDUCATION

- The education curriculum must include imparting knowledge about organ donation regarding policies, legal requirements and preparation of organ donor

NURSING RESEARCH

- Nursing research is an essential component of today's nursing education.
- This research can be used for basis for further study on preparing learning resource material on organ donation and to find effectiveness on knowledge and attitude.

RECOMMENDATION

Similar study can be done on a large sample to generalize the finding.

Similar study can be conducted with long duration.

A comparative study can be conducted with control group

Further studies can be conducted using informational booklet to check effect on pre and post test knowledge.

SUMMARY

This chapter deals with summarization of the research study, bringing forth major finding of the study, conclusion, nursing implication in nursing practice, education and research as well as the recommendation for study.

This study highlights level of knowledge and attitude of college student towards organ donation

CONCLUSION

With the help of above finding it is concluded 52 student have average level of knowledge and there was also no association found between knowledge and demographic variables. There was positive attitude regarding organ donation among participant and there was an association found between attitude score and Age, Residential place, Religion and Parent education.

BIBLIOGRAPHY

- [1] Gaidhani R. *Organ donations, transplantations and problems in its processes: Experience narratives of persons involved (A Study in Mumbai and Thane)* (Doctoral dissertation).
- [2] Rudge C, Matesanz R, Delmonico FL, Chapman J. International practices of organ donation. *British journal of anaesthesia*. 2012 Jan 1;108(suppl_1):i48-55.
- [3] Macdonald L. 1915: the death of innocence. JHU Press; 2000 Apr 21.
- [4] Sharp LA. *Strange harvest: Organ transplants, denatured bodies, and the transformed self*. Univ of California Press; 2006 Oct 4.
- [5] Vijayalakshmi P, Sunitha T S, Gandhi S, Thimmaiah R, Math SB. Knowledge, attitude and behaviour of the general population towards organ donation: An Indian perspective . *Natl Med J India* [serial online] 2016 [cited 2020 Dec 3];29:257-61. Available from: <http://www.nmji.in/text.asp?2016/29/5/257/197806>
- [6] Cantwell M, Clifford C. English nursing and medical students' attitudes towards organ donation. *J Adv Nurs*. 2000;32:961-8. [[PubMed](#)] [[Google Scholar](#)]
- [7] 5. World Health Organisation (WHO) *Global glossary of terms and definitions on donation and transplantation*. Vol. 14. Geneva: 2009. [[Google Scholar](#)]
- [8] Rothblatt M. *Your life or mine: how geoethics can resolve the conflict between public and private interests in xenotransplantation*. Taylor & Francis; 2017 Jul 5.
- [9] Manish R. Balwani, Manoj R. Gumber, Pankaj R. Shah, Vivek B. Kute, Himanshu V. Patel, Divyesh P. Engineer, Dinesh N. Gera, Umesh Godhani, Mehin Shah & Hargovind L. Trivedi (2015) Attitude and awareness towards organ donation in western India, *Renal Failure*, 37:4, 582-588, DOI: [10.3109/0886022X.2015.1007820](https://doi.org/10.3109/0886022X.2015.1007820)
- [10] Sam N, Ganesh R, Indrapriyadarshini V, Jeyamarthan S, Nandhini CK. Awareness, knowledge, and attitude regarding organ donation among final year students of medical, Dental, Engineering, and Arts and Science Colleges in Thiruvallur and Chennai City, India. *Indian Journal of Transplantation*. 2018 Jan 1;12(1):25.
- [11] Chakradhar K, Doshi D, Reddy BS, Kulkarni S, Reddy MP, Reddy SS. Knowledge, attitude and practice regarding organ donation among Indian dental students. *International journal of organ transplantation medicine*. 2016;7(1):28.
- [12] Mithra P, Ravindra P, Unnikrishnan B, Rekha T, Kanchan T, Kumar N, Papanna M, Kulkarni V, Holla R, Divyavaraprasad K. Perceptions and attitudes towards organ donation among people seeking healthcare in tertiary care centers of coastal South India. *Indian journal of palliative care*. 2013 May;19(2):83.