

Knowledge and Attitude Regarding Organs Donation Among Nursing Students in Lahore: A Cross-Sectional Descriptive Study

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ABSTRACT

Background and Objective: Organ donation is an effective and desirable procedure of treatment for patients who are suffering from end-stage organ failure to any cause. The global issue which patients are facing a negative attitude of the potential donors and their family members regarding organ donation. Nurses are in close contact with the persons and attendants and they can make a significant change in their attitude, that it is necessary to see the knowledge and attitude of nurses towards organ donation. The study assessing the knowledge and attitude of undergraduate nursing students regarding organ donation at College of Nursing Jinnah Hospital, Lahore. **Materials and Methods:** A cross-sectional descriptive study was conducted among nursing students of a government nursing college in Lahore. The study sample size was 60 undergraduate nursing students. Data was collected through a pre-validated questionnaire from previous research depending on 20 questions for variables check. Data was organized and analyzed using SPSS version 20. Simple descriptive statistics were applied to see the frequency and percentage and summarize the results. **Results:** All 60 students participated in the study making the response rate 100%. The majority of the respondents (66.3%) have good knowledge but have negative responses toward organ donation and only 26.7% of students showed positive attitudes. Overall the students showed a negative attitude toward organ donation. **Conclusion:** As the majority of the students showed sufficient knowledge but had a negative attitude towards organ donation, so concluded that it is mandatory for colleges to make changes in the nursing syllabus that allow students to raise their thoughts and remove their erroneous barriers regarding organ donation to increase their attitudes.

KEYWORDS

Organ donation, transplantation, nursing students, nursing syllabus, potential donor, KAP (knowledge, attitude and practices)

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INTRODUCTION

Organ donation has gained utmost importance in today's world because it is a procedure which can save millions of lives. In the 20th century science introduced many advanced technologies and techniques. One of its largest achievements in this world is organ plantation by giving client donations which is also giving in many other diseased and terminally ill patients a new hope in life¹. Organ donation is defined as the process of giving one or more vital organs of a person to another person for transplantation and to restore one's life². It helps patients who are suffering from end-stage organ diseases³. Dr. Joseph Murray and Dr. David were among the earliest surgeons who performed the first ever kidney transplant surgery from Ronald Herrick (donor) into Richard (recipient his identical twin) on December 23, 1954⁴. Moreover, the first heart transplant surgery was performed by Christian Bernard on Dec 3, 1967, at Cape Town in South Africa⁵.

Specialists have believed that approximately up to 50 persons can get benefits from one deceased donor. The parts of the body which can be transplanted include kidney, liver, pancreas, intestine, heart, lungs and cornea. The donor must be devoid of diseases like HIV/AIDs⁶. It is surprising to say that 30 organs are donated by a brain-dead person whereas few donations can be made after heart failure. Although organ donation has prestigious importance and is a successful method, it is estimated that 6000 patients die each year just because of waiting for a volunteer donor⁷. The demand for organs tremendously surpasses the number of donated organs at hand⁸. In Pakistan there is a large list of people waiting for a donation of organs including 1500 people for kidney, 800 for liver and 600 for heart transplant. It is known that Spain is the country in which the donation rate is highest with 35.1/million people in 2012 whereas Turkey had just 4.6/million people⁹.

In modern science has introduced many advanced technologies and techniques. One of its largest achievements in this world is organ plantation by giving the client donations for a new hope and to restore life. Previous studies revealed that there are huge gaps in the knowledge and attitude of people regarding organ donation and it is aggravated by religious myths and irrational beliefs creating fear and suspicion in general people. Most importantly religion affects the attitude of people. It is not against organ donation but some orthodox Jews, Hindus and Muslims discourage its practice. Moreover, some Muslim scholars also have objections because they think the human body is an "Amanah" from God and it should not be sacrilege. Multiple other factors affecting the attitude include personal, ethical, medical, legal, organizational and social issues. Awareness, positive attitude and consent given by the relatives in case of brain death are essential components for the donation program to be successful⁶.

Graham *et al.*⁷ conducted a study on knowledge and attitudes regarding organ donation among staff nurses and briefed that a nurse is a person who has frequent contact with patients and families during hospital stays. The knowledge and positive attitude of nurses regarding organ donation can have a decisive influence on the donor's family. They can make them realize that their one intelligent decision can save someone life that is chronically ill. They are capable of changing the attitude of people about organ donation.

The importance of the current study is to save the lives of patients who can be treated by transferring healthy organs to replace unhealthy ones. Various factors are associated with the attitude of people regarding OD. There is a need to improve the knowledge and attitude of people to save others' lives. The majority of people show a negative attitude towards OD either due to a lack of knowledge or religious or cultural concerns. Effective educational programs especially, nurses can contribute in this regard to change people's perception of organ donation because they have limited knowledge about organ donation and transplantation. Researcher conducted a cross-sectional study to assess the level of knowledge and attitude of undergraduate nursing students.

Hence, the researcher felt the need to assess the level of knowledge and attitude of student nurses regarding organ donation so that they can learn to participate in the success of donation programs early in their training period.

MATERIALS AND METHODS

A descriptive cross-sectional study was conducted to assess the level of knowledge and attitude of undergraduate nursing students of classes 2nd, 3rd and 4th year of BSc. Nursing of Jinnah Hospital, Lahore was included in this study. Data was collected through a validated questionnaire with a non-random convenient sampling technique. The 60 undergraduate 2nd, 3rd and 4th year BSc nursing students who have not completed their bachelor's degree were interviewed by using a questionnaire containing 3 parts, 1st for demographic data, 2nd for knowledge and 3rd for attitude assessment. The study was conducted between 15 August 2022 to 25 October 2023.

Statistical analysis: Data was analyzed by using the IBM SPSS (statistical package for social sciences) version 20 through descriptive statistical techniques for calculating such as mean, frequency and percentage. A validated questionnaire from previous research was used to assess the level of knowledge of undergraduate nursing students.

Ethical consideration: The researcher follows all the research principles and ethics. The participants included in the study with their informed consent form and voluntary participation and also made sure of their confidentiality after taking the ethical clearance form own institution's board.

RESULTS

Demographic data was collected from 60 participants out of which about 58 participants' ages belong to 18-22 and 41.7% of the participants belong to 23-25. As well as religion the majority (93.3%) of the participants belonged to the Muslim community and the remaining 6.7% were Christians. Most of the participants belong to 4th year nursing students of AIMC, Lahore. A validated questionnaire from previous research was used to assess the level of knowledge of undergraduate nursing students. The 10 questions were used for the assessment of knowledge.

Table 1 data assesses the level of knowledge of the undergraduate nursing students and reveals that almost all the present students have heard about the term "organ donation" and the majority (65.0%) of the nursing students understand the correct meaning of the term organ donation. The Internet was the major source of information. More than ninety present (93.0%) of the nursing respondents knew the purpose of this procedure regarding organ shifting. The majority (78.0%) of the students know that organs like kidneys, blood and eyes can be donated. The majority (88.3%) will decide without any consultation when they need to donate the organ during the life span but organ donation after death must be consulted with family members. More than three-quarters (76.7%) of the students stated that guardians can substitute decision-making for mentally disabled persons. And majority (91.7%) of student's view that organ donation involves risk and almost all (93.3%) of students deny needing effective laws to govern the process of organ donation.

Table 2 regarding the assessment of the attitude level of the undergraduate nursing students. Data showed that sufficient (70.0%) students agree to approve of cadaver organ donation and the majority (75.0%) agree on promoting and creating awareness among masses regarding the organ donation 26.7% agree with the statement that it is not right to prolong life through the use of human organ transplants. About more than half (56.7%) of students strongly feel that donated organs could not prolong life through using organ transplantation and only (18.3%) of students' opinions were neutral. As regards the belief of the students that the donated organs could be misused, the majority (70.0%) agreed on it. Less than

Table 1: Assess the level of knowledge of the undergraduate nursing students

Statement	Yes		No	
	F	%	F	%
Have you heard about the term "organ donation"	59	98.3	1	1.7
Can family/guardians make substitute decision making for mentally disabled persons in regard of organ donation	46	76.7	14	23.3
Does organ donation involve any risk?	55	91.7	5	8.3
Is there any need for effective laws to govern the process of organ donation?	56	93.3	4	7.7
Statement	F	%		
Do you understand the term "organ donation" means?				
Removal of tissues of the human body from cadaver	1	1.7		
Removal of tissues of body from a living donor	2	3.3		
Removal of tissues of the human body for treatment	18	30.0		
All of the above	39	65.0		
Do you understand why is organ donation done for?				
Save life	56	93.0		
Money	4	8		
Are you known that in which organs can be donated?				
Kidney	7	11.7		
Blood	1	1.7		
Liver	6	9.6		
All of the above	46	78.0		
For living donation, who should give consent?				
Donor	33	88.3		
His family	5	8.3		
His spouse	1	1.7		
Others	1	1.7		
Who should give consent after the death for organ donation?				
No one	5	6.3		
Family	41	68.3		
Spouse	6	10.0		
Doctor	8	13.3		

Table 2: Assess the level of attitude of the undergraduate nursing students

Statement	Percentage				
	SA	A	N	D	SD
I approve of cadaver organ donation	26.7	43.3	18.3	10.0	1.7
Should organ donation be promoted?	28.3	46.7	18.3	6.2	0.5
I do not feel it is right to prolong the life through the use of human organ transplantation	5.6	8.3	30.0	50.0	6.7
Do you believe that there is a danger that donated organs could be misused	26.7	43.3	18.3	6.7	5.0
I would donate my own organs	5.0	26.7	28.3	20.0	20.0
I would donate the organs of my child or family member	3.3	16.7	30.0	31.7	18.3
My attitude regarding organ donation is strongly influenced by my religious beliefs	11.7	50.0	30.0	5.0	3.3
I would be willing to sit down and discuss organ donation with my family	15.0	43.3	30.0	6.7	5.0
The removal of person's organs before the heart stops is a violation of person's rights	31.7	31.7	20.0	15.0	1.7
Organ donation is more trouble than its worth	11.7	18.3	28.3	18.3	3.3

SA: Strongly agree, A: Agree, N: Neutral, DA: Disagree and SD: Strongly disagree

(30.0%) of the students deny donating their organs. The (30.0%) remained neutral while only (26.7%) agreed to donate their organs and (50.0%) disagreed on to donate the organs of their child and family members. The majority (51.7%) of students agreed that their attitude regarding OD is strongly influenced by religious beliefs whereas only (8.3%) of nursing students disagree with this statement.

The 58.3% of students showed a positive attitude to discussing this topic with their family members (30.0%) showed a neutral attitude and (11.7%) did not discuss the matter with the family. The majority (63.4%) of students strongly agreed that the removal of the organs of a person is a violation of the

person's and human rights. The 30.0% of the students agree that organ donation is more trouble than it is worth, the rest of them (28.3%) were neutral and 21.7% did not agree with this statement. The overall students showed a negative attitude regarding organ donation.

DISCUSSION

Organ donation has gained utmost importance in today's world because it is a procedure which can save millions of lives. This cross-sectional study was used to assess the knowledge and attitude of the nursing students. The results of the current study showed that all the students have good knowledge about organ donation but showed a negative attitude toward donation.

The current study was consistent with the study conducted by Muleta *et al.*⁶ to assess the knowledge, attitude and factors associated with organ donation among medical students in which medical students also have good knowledge (88.6%) but only (10.2%) students showed a positive attitude and remaining students were not willing to donate their organs.

In the present study, considering the demographic variables, most of the students ranged from 18-22 years (60%). About 40% belong to the final year. About 98.3% were unmarried and 93.3% of students were Muslims. On analyzing the profile of students, it is found that students in the final year have better knowledge and understanding of the term organ donation.

Additional researchers have found that nursing students are terrified of the loss of the body organs associated with being a donor. In further, a nurse who understood the concept of death more commonly had a favorable attitude regarding organ donation¹⁰. The results of the study conducted by Khalid *et al.*¹¹ were consistent with the current study results which are less than the majority. About 43.8% of people were unsure that their religion either accepts organ donation and 30% were not aware of it. As well as religious concerns the study, conducted by Keya *et al.*¹². The gift of life: Knowledge and attitude toward organ donation among medical students in Malaysia, no religious disparity was found. But in current study, only 11.7% Muslim students are strongly agreed with disparity.

Majority of the students (63.4%) believe that the removal of the person's organs before the heart stops is a violation of the person's rights. This is also associated with the negative attitude of people regarding organ donation. The majority (58.4%) of respondents disagreed to donate the organs of their child or family members and were also not willing to donate their organs to another.

Present study results were also consistent with the study result of Kanganavalli¹³ who conducted a descriptive study to assess the knowledge regarding organ transplantation among staff nurses in a selected hospital in Mangalore. The results of the study showed that the majority (68%) of staff nurses had knowledge of organ transplantation but they needed to update their knowledge of surgical procedures, techniques and management and they have negative attitudes toward organ donation. The study results suggested that in-service educational programs need to be planned regularly about organ donation.

CONCLUSION

The study participants had sufficient knowledge but had a negative attitude toward organ donation. The college and clinical departments that practice transplantation medicine must be involved in the regular teaching as well as changing the ongoing syllabus that allows students to remove their superficial barriers of OD. Presently there is a need to address the issue of OD through various campaigns and educational programs to create awareness in the public regarding OD so that their attitude toward volunteer donors could be increased. This study was conducted only in one college of nursing, so the other studies may be conducted on a wide scale involving public and private nursing colleges. There is a need for KM institutes to create awareness and enhance the positive attitude of nursing students regarding organ donation. Students should be encouraged to donate organs to recipients.

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