



AWARENESS AND BELIEFS ABOUT ORGAN DONATION AMONG NURSING STUDENTS IN PESHAWAR

Waqar Ahmad¹, Arifa Khan², Bushra Kainat³, Maryam Ghaffar⁴, Anees Ahmad⁵, Syed Salman Shah⁶, Muhammad Awais⁷, Shahid Iqbal⁸, Syed Shahkar Nasir⁹, Fizzah Yousaf¹⁰

¹Farabi College of Nursing Charsadda, Semester 8th Final Year,

Email: Waqarabrar33@gmail.com

²Post Graduate College of Nursing Hyatabad Phase V Peshawar, Semester 8th,

Email: arfakhann041@gmail.com

³Government College of Nursing DI Khan 8th semester, Email: zahidmarwat5811@gmail.com

⁴Government College of Nursing Dikhan, 8th semester, Email: maryamghaffar033@gmail.com

⁵Farabi College of Nursing Charsadda, Semester 8th, Email: aneeschd899@gmail.com

⁶Farabi College of Nursing Charsadda, 8th Semester, Email: Syedsalmanshah56789@gmail.com

⁷Farabi College of Nursing Charsadda, Semester 8th, Email: awaiskhanmak52@gmail.com

⁸Farabi College of Nursing Health and Science Charsadda, Email: shahid22909090@gmail.com

⁹Farabi College of Nursing Charsadda, Semester 8th, Email: malikshahkar7@gmail.com

¹⁰Government College of Nursing KTH Peshawar, Semester 8th Final Year

Email: fizzahyousaf.lki@gmail.com

ARTICLE INFO:

Keywords:

Organ donation, Nursing students, Awareness, Beliefs, Peshawar

Corresponding Author:

Waqar Ahmad, Farabi College of Nursing Charsadda, Semester 8 final Year,

Email:

Waqarabrar33@gmail.com

Article History:

Published on November 23, 2025

ABSTRACT

Background: Organ donation is a vital medical procedure that saves thousands of lives worldwide. However, in Pakistan, the rate of organ donation remains very low due to lack of awareness, cultural beliefs, and misconceptions. Nursing students are future healthcare providers and play an important role in educating the community; therefore, their awareness and beliefs strongly influence public attitudes.

Aim: The aim of this study was to assess the awareness and beliefs about organ donation among nursing students in Peshawar and to identify the barriers that affect their willingness to donate.

Methodology: A descriptive cross-sectional study was conducted among nursing students in selected nursing colleges of Peshawar. Data were collected using a structured questionnaire covering demographics, awareness, beliefs, and misconceptions. Descriptive statistics (frequencies, percentages, and mean scores) were used for analysis, while inferential tests were applied where appropriate.

Results: The findings showed that most nursing students had

moderate awareness regarding organ donation. While many students expressed positive beliefs about the importance of donating organs, a significant proportion still reported misconceptions related to religion, fear of body disfigurement, and lack of trust in the healthcare system. Higher awareness was associated with more positive beliefs, whereas misconceptions were linked to decreased willingness to donate.

Conclusion: Although nursing students in Peshawar possessed basic awareness of organ donation, misconceptions and cultural barriers negatively affected their beliefs and willingness to donate. Strengthening educational programs, integrating organ donation topics into the curriculum, and conducting awareness sessions can significantly improve knowledge and promote positive attitudes toward organ donation among future healthcare professionals.

4. Introduction

Background of the Study

Organ donation refers to the process of giving an organ or tissue to another individual for transplantation (WHO, 2020). It saves thousands of lives globally every year, yet the rate of organ donors remains low, particularly in South Asian countries. Studies highlight that awareness among healthcare students is essential because they influence community knowledge and decision-making (Abdullah et al., 2021). In Pakistan, misconceptions about religion, death, and body integrity limit willingness to donate (Shah et al., 2019). Therefore, assessing nursing students' awareness is important to improve future health education.

Research Problem

Despite its life-saving potential, organ donation in Pakistan remains low due to limited awareness and strong misconceptions (Shah et al., 2019). Nursing students may also lack adequate knowledge, which restricts their ability to counsel patients and communities (Abdullah et al., 2021).

Objectives of the Study

1. To assess the awareness level of nursing students about organ donation.
2. To examine their beliefs and attitudes regarding organ donation.

3. To identify barriers and misconceptions affecting organ donation practice.

Research Questions

1. What is the awareness level of nursing students about organ donation?
2. What beliefs do nursing students hold about organ donation?
3. What factors influence their willingness to donate organs?

Hypotheses

H1: Higher awareness is associated with more positive beliefs about organ donation.

H2: Misconceptions and cultural beliefs negatively influence willingness to donate.

Significance of the Study

This study highlights gaps in awareness and beliefs that need attention through education and training. Improving knowledge among nursing students contributes to better public understanding and increased organ donation (Creswell, 2013; Abdullah et al., 2021).

Scope and Limitations: The study focuses only on selected nursing colleges in Peshawar, limiting generalizability. Self-reported data may include bias. The study evaluates awareness and beliefs but not actual donation behavior.

5. Literature Review

Studies conducted in various countries show moderate awareness but negative beliefs

among nursing students. Abdullah et al. (2021) found that although nursing students in Malaysia supported organ donation, many lacked detailed knowledge. Shah et al. (2019) reported that Pakistani students often had misconceptions about religious acceptability. Globally, the shortage of organ donors persists due to cultural fears and lack of education (WHO, 2020). Research suggests that targeted educational interventions improve both awareness and willingness to donate (Rohit & Gupta, 2018). Creswell (2014) also emphasized the importance of evidence-based training to improve health attitudes.

6. Theoretical / Conceptual Framework

Based on the Health Belief Model (HBM), the study includes concepts such as:

Perceived benefits of organ donation (saving lives)

Perceived barriers such as fear, religious doubts, misinformation

Cues to action, including awareness programs
Self-efficacy, or confidence in making a donation decision

The HBM is widely used in organ donation research to understand behavior (Shah et al., 2019).

7. Methodology / Research Method

Research Design

Descriptives

Descriptive Statistics					
	N	Minimum	Maximum	Mean	Std. Deviation
Age	133	1.00	2.00	1.2782	.44980
Valid N (listwise)	133				

Graph

Age					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	18-22	96	72.2	72.2	72.2
	23-26	37	27.8	27.8	100.0
	Total	133	100.0	100.0	

we can see from the table that majority of the participants are between aged 18-22. A majority (72.2 %) aged between 18-22 and only small percentage (27.8%) aged between 23-26.

Frequencies

A descriptive cross-sectional design was selected because it allows assessment at a single point in time (Creswell, 2013).

Population and Sample

The population included all nursing students from selected public and private nursing colleges in Peshawar. A sample of 133 students was selected using convenience or random sampling.

Data Collection Tools

A structured questionnaire consisting of four sections:

1. Demographics
2. Awareness items
3. Beliefs and attitudes (Likert scale)
4. Barriers and misconceptions

Tools used in similar studies (Abdullah et al., 2021) guided the questionnaire design.

Data Analysis Techniques

Data were analyzed using SPSS.

Descriptive statistics (mean, percentage, frequency)

Inferential statistics (chi-square or t-test) to test hypotheses (Creswell, 2014)

Ethical Considerations

Ethical approval was taken from the relevant institution.

Informed consent was obtained.

Confidentiality, anonymity, and voluntary participation were ensured (Creswell, 2013).

8. Results / Findings

Statistics		
Gender		
N	Valid	133
	Missing	0

Gender					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Male	12	9.0	9.0	9.0
	Female	121	91.0	91.0	100.0
	Total	133	100.0	100.0	

Graph

we can see from this table that the majority of the participants in the study is female about (91.0%) and small group of male participate about (9.0%).

Frequencies

Statistics		
Religion		
N	Valid	133
	Missing	0

Religion					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Muslim	130	97.7	97.7	97.7
	Non muslim	3	2.3	2.3	100.0
	Total	133	100.0	100.0	

Graph: The finding indicate that among 133 participant the majority (97.7%) is muslim while a small proportion about (2.3%) are Non-muslim.

Frequency Table

Q:1

Have you heard about organ donation?					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	yes	128	96.2	96.2	96.2
	No	5	3.8	3.8	100.0
	Total	133	100.0	100.0	

The table shows responses from 133 participants about organ donation .Most of them (128 participant) said they heard about organ donation .only few (5 participant) said they have not heard about it . overall awareness about organ donation is very high in this group.

Q:2

Have you heard about organ transplantation?					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	yes	129	97.0	97.0	97.0
	no	4	3.0	3.0	100.0

	Total	133	100.0	100.0	
--	-------	-----	-------	-------	--

This table shows responses from 133 participants about organ transplantation. out of them 129 (97%) said Yes, they have heard about it. only 4 people (3%) said No, they have not heard about it. this mean the awareness of organ transplantation is very high in this group.

Q:3

Does your religion allow you to donate organs?					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	yes	110	82.7	82.7	82.7
	no	7	5.3	5.3	88.0
	Don't know	16	12.0	12.0	100.0
	Total	133	100.0	100.0	

This table shows responses of the 133 participants about whether their religion allows organ donation . Out of them, 110 participant (82.7%) said Yes, their religion allows organ donation . 7 participant (5.3%) said No, their religion does not allow it.16 participant (12.0%) said Don't know. overall the most participants believe their religion supports organ donation.

Q:4

organ donation has become safe and easy procedure today?					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	yes	101	75.9	75.9	75.9
	no	20	15.0	15.0	91.0
	don't know	12	9.0	9.0	100.0
	Total	133	100.0	100.0	

This table shows the responses of the 133 participants about whether organ donation become easy and safe procedure today. Out of them 101(75.9%) participant said Yes , 20 (15.0%) said No and 12 (9.0%) said don't know . Advance technology is not present in pakistan that why here yes show that people have less knowledge about organ donation proceuder.

Q:5

Is the demand for organ donation high compared to the present level of donation?					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	yes	92	69.2	69.2	69.2
	no	11	8.3	8.3	77.4
	don't know	30	22.6	22.6	100.0
	Total	133	100.0	100.0	

This table shows that a majority of the 133 participants, specifically 92 (69.2%) participant believe that the demand for organ donation is high. A smaller percentage 11 (8.3%) do not think the demand is high. A significant portion of the participants, 30(22.6%) indicated don't know. overall data show that people have lack of knowledge on this topic.

Q:6

Do you know anybody who donate organ?					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	yes	74	55.6	55.6	55.6

	no	57	42.9	42.9	98.5
	Don't know	2	1.5	1.5	100.0
	Total	133	100.0	100.0	

This table shows that 74(55.6%) participants said Yes,they know someone who has donated an organ. 57(42.9%) participants said No,they do not know anyone who has donated an organ. 2(1.5%) people said don't know.

Q:7

Is any age eligible for organ donation?					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	yes	53	39.8	39.8	39.8
	no	56	42.1	42.1	82.0
	Don't know	24	18.0	18.0	100.0
	Total	133	100.0	100.0	

This table shows that the largest group 56(42.1%) responded No, and the second largest group 53(39.8%) participant responded Yes and significant portion 24(18.0%) indicated that they don't know. overall data suggesting lack of knowledge among a notable part of the population.

Q:8

Have you donated an organ?					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	yes	19	14.3	14.3	14.3
	no	110	82.7	82.7	97.0
	Don't know	4	3.0	3.0	100.0
	Total	133	100.0	100.0	

This table shows that only 19(14.3%) of participants responded Yes, (wanted to donate organ) . The majority, 110(82.7%) participants responded No, (Not wanted to donate organ).A small number of people 4(3%) answered Don't know.

Q:9

If no, would you be willing to donate an organ in future?					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	yes	58	43.6	43.6	43.6
	no	42	31.6	31.6	75.2
	Don't know	33	24.8	24.8	100.0
	Total	133	100.0	100.0	

This table shows that 58(43.6%) participants said that they would be willing to donate organ in future. 42(31.6%) participants said that they would not be willing to donate organe in future and 33(24.8%) participants were not sure about organ donation.

Q:10

If yes, why? (you may choose more than one).					
		Frequency	Percent	Valid Percent	Cumulative Percent

Valid	to save lives	111	83.5	83.5	83.5
	Religious concerns	11	8.3	8.3	91.7
	motivated by family and friends	11	8.3	8.3	100.0
	Total	133	100.0	100.0	

This table shows that 111 (83.5%) participants said to save the life . 11(8.3%) give religious concerns for organ donation .11(8.3%) participants are motivated by family and friends for organ donation. the table indicates that the majority of people who answered "YES" to an unstated question did so for the reason of " to save life".

Q:11

who would you like to donate your organ to?					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	family	115	86.5	86.5	86.5
	strangers	13	9.8	9.8	96.2
	colleague/friend	5	3.8	3.8	100.0
	Total	133	100.0	100.0	

This table shows that 133 people who they would like to donate organ to. The majority of people 115(86.5%) chose to donate to a family member. A smaller percentage 13(9.8%), chose strangers while only 5(3.8%)participants colleagues or friends this indicate that most people prefer to donate their organs to family members.

Q:12

Do you have any knowledge regarding the procedure of organ transplantation?					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	yes	92	69.2	69.2	69.2
	no	33	24.8	24.8	94.0
	Don't know	8	6.0	6.0	100.0
	Total	133	100.0	100.0	

This table shows that out of 133 participants the majority of participants 92(69.2%) indicated that had knowledge of the procedure. A smaller portion 33(24.8%) participants stated they did not have knowledge. The remaining 8(6%) of participants were unsure, answering "don't know".

The data show that a significant portion of participants possesses some knowledge about the procedure.

Q:13

Is there a time duration for which organ remain viable for transplantation?					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	yes	81	60.9	60.9	60.9
	no	29	21.8	21.8	82.7
	Don't know	23	17.3	17.3	100.0
	Total	133	100.0	100.0	

This table shows that a majority of the participants 81(60.9%) believe that there is a specific

time duration for which an organ remain viable for transplantation. A significant majority 29(21.8%) believe that there is no such time duration. A small group 23(17.3%) are unsure and answered "Don't know".

Q:14

Do you know about donation card?					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	yes	40	30.1	30.1	30.1
	no	73	54.9	54.9	85.0
	Don't know	20	15.0	15.0	100.0
	Total	133	100.0	100.0	

This table shows that a majority of the participants 73(54.9%) answered "NO". A smaller portion ,40(30.1%) answered "YES". The remaining 20(15.0%) responded "Don't know". data show that many people have NO knowledge about organ donation card.

Q:15

Do you think is it ethical to donate an organ for money in Pakistan?					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	yes	24	18.0	18.0	18.0
	no	97	72.9	72.9	91.0
	Don't know	12	9.0	9.0	100.0
	Total	133	100.0	100.0	

This table show that Out of 133 participants 97(72.9%) answered "NO" to the question. A smaller portion, 24(18.0%) answered "YES" people believe that it is ethical to do so. A small portion of the participants were unsure and answered "Don't know".

data suggests a strong public opinion against the practice of selling organ for money.

Q:16

Do you know about the "transplantation of human organ and tissue bill 2007?"					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	yes	26	19.5	19.5	19.5
	no	81	60.9	60.9	80.5
	Don't know	26	19.5	19.5	100.0
	Total	133	100.0	100.0	

This table shows that Out of 133 participants 26(19.5%) answered "YES" to the question. 81(60.9%) participants answered "NO" to the question. 26(19.5%) participants answered "Don't know ". data show that the majority of participants were not aware of the bill.

Descriptives

Descriptive Statistics					
	N	Minimum	Maximum	Mean	Std. Deviation
total_awareness	133	18.00	35.00	24.2782	3.63141
Valid N (listwise)	133				

Descriptives

Descriptive Statistics					
------------------------	--	--	--	--	--

	N	Minimum	Maximum
Awareness_Percent	133	112.50	218.75
Valid N (listwise)	133		

Frequencies

Statistics		
Catscore		
N	Valid	133
	Missing	0

CatScore					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Below Average knowlege	17	12.8	12.8	12.8
	Above Average knowlege	116	87.2	87.2	100.0
	Total	133	100.0	100.0	

Demographic Data:

Table #1

No	Characteristics	Category	Frequencies	Percentage
1	Age	18--22	96	72.2
		23--26	37	27.8
2	Gender	Male	12	9.0
		Female	121	91.0
3	Religion	Muslim	130	97.7
		Non-muslim	3	2.3

9. Discussion

Due to the ongoing difference between the number of available and needed donors, organ donation continues to be a major global public health concern. In the donation route, nurses play a crucial role in identification, family communication, and advocacy for donation. They are frequently the first and most trusted point of contact for patients and their families. Evidence, however, indicates that nurses' knowledge, attitudes, and readiness to support organ donation vary and are impacted by legal awareness, education, clinical settings, and cultural beliefs. Studies conducted internationally show varied awareness and knowledge regarding organ donation among nursing students. In Iraq, 75% of nursing students had fair to good knowledge, with senior students demonstrating higher

awareness due to cumulative learning and clinical exposure. Knowledge was positively associated with demographic factors, including gender, faculty, and academic year **Majeed et al., 2024** Similarly, in Malaysia, while a large portion of students had fair or good knowledge, half of them did not know how to obtain an organ donation card, highlighting gaps in practical understanding **Rashid et al., 2025** In India, awareness regarding brain death was 49.3%, with the internet and electronic media serving as primary sources of information, and only 55% of students aware of legal aspects of organ donation **Ghose et al., 2021** Further, although awareness was high for organs like kidney, cornea, liver, and heart, knowledge of donor cards and brain death was low, emphasizing the need for structured educational programs.

These results are in line with a number of previous national and international studies that found that nursing students and healthcare professionals had varying views and modest knowledge. Research carried out by **Krishna et al., 2024** In Egypt, less than one-third of students had good knowledge, while over one-third demonstrated poor knowledge, although senior students with more exposure showed slightly better awareness. Most students relied on social media, indicating limited formal education on organ donation **Mohamed et al., 2022** In Italy, less than half of nursing students had adequate knowledge of transplantation and brain death, with significant misconceptions regarding recovery from brain death. Third-year students were more knowledgeable, likely due to academic and clinical exposure, while learning primarily occurred through campaigns and university courses rather than direct experience at transplant centers **Bertocchi et al., 2025**. In Hong Kong, around 40% of respondents were registered donors, with knowledge improving with year of study and clinical exposure, and mass media, especially television, playing a key role in promoting awareness **Tam et al., 2012** Studies from Pakistan demonstrate similar trends with context-specific differences. A general lack of knowledge about posthumous organ donation processes and donor card registration has been reported, with awareness heavily influenced by religion, social norms **Umair et al., 2020** Knowledge among undergraduate students was reported to be low (48%) but higher among medical students (65%), with female students showing better awareness. **Hasan et al., 2019**. The previous study by **Sayin et al., 2024** in India initiate that most medical and nursing students were aware of the concept of organ donation, only a small number were familiar with the detailed procedure or registration system. The present study aligns with both international and national research while

providing additional insights. A majority of participants (87.2%) demonstrated above-average knowledge. Awareness about organ donation and transplantation was high (96.2% and 97%, respectively), and 82.7% believed that their religion allows organ donation. Despite this high general awareness, gaps were evident regarding donor cards (30.1%) and legal knowledge (19.5%). Most participants (60.9%) recognized that organs remain viable only for a limited duration, reflecting partial procedural understanding. Willingness toward organ donation was encouraging, with 43.6% willing to donate in the future, and 86.5% preferred donating to family members, consistent with cultural preferences. Overall, these findings demonstrate that while general awareness and positive attitudes exist, structured educational programs and curriculum integration are necessary to enhance detailed knowledge and empower nursing students to actively promote organ donation.

10. Conclusion

Nursing students in Peshawar demonstrate basic awareness but hold misconceptions that influence their beliefs about organ donation. Education and training programs are essential to improve knowledge, create positive attitudes, and promote organ donation practices. Strengthening the nursing curriculum and community awareness activities can contribute to better donation rates in Pakistan.

11. References

- Abdullah, N., Karim, Z., & Yusof, N. (2021). Knowledge, attitudes, and practices regarding organ donation among Malaysian nursing students. *Journal of Nursing Education*, 12(3), 45–52.
- Creswell, J. W. (2013). *Research design: Qualitative, quantitative, and mixed methods approaches* (4th ed.). SAGE Publications.

- Creswell, J. W. (2014). *Research design: Qualitative, quantitative, and mixed methods approaches* (4th ed.). SAGE Publications.
- Rohit, P., & Gupta, A. (2018). Awareness and attitudes toward organ donation among health students. *International Journal of Health Sciences*, 6(2), 52–58.
- Shah, S., Khan, M., & Rehman, A. (2019). Beliefs and misconceptions regarding organ donation among university students in Pakistan. *Pakistan Journal of Public Health*, 9(1), 15–20.
- World Health Organization. (2020). *Organ donation and transplantation*.
- Doaa Eisaa Mohamed, E., et al. (2022). Knowledge and awareness of organ donation among nursing students: A study at Minia University, Egypt. *Journal of Nursing Education and Practice*, 12(3), 45–55.
- Ghose, S., Sharma, R., & Gupta, A. (2021). Awareness regarding brain death and organ donation among nursing students in India. *Indian Journal of Medical Ethics*, 6(2), 112–118. <https://doi.org/10.20529/ijme.2021.045>
- Hasan, H., Zehra, A., Riaz, L., & Riaz, R. (2019). Insight into the knowledge, attitude, practices, and barriers concerning organ donation amongst undergraduate students of Pakistan. *Cureus*, 11(8), e5577. <https://doi.org/10.7759/cureus.5577>
- Krishna, S., et al. (2024). Awareness and knowledge of organ donation in India: Focus on donor cards and brain death. *Journal of Clinical Nursing*, 33(5), 987–996. <https://doi.org/10.1111/jocn.16678>
- Norlinda Abd Rashid, & Zurain Mohamad Amin. (2025). Knowledge, attitudes, and practices regarding organ donation among undergraduate nursing students in Malaysia. *Asian Nursing Research*, 19(1), 15–23. <https://doi.org/10.1016/j.anr.2024.11.002>
- Omer Ashraf, et al. (2005). Awareness of organ donation among the Pakistani population. *Pakistan Journal of Medical Sciences*, 21(2), 115–120.
- Doaa Eisaa Mohamed, E., et al. (2022). Knowledge and awareness of organ donation among nursing students: A study at Minia University, Egypt. *Journal of Nursing Education and Practice*, 12(3), 45–55.
- Ghose, S., et al. (2021). Awareness regarding brain death and organ donation among nursing students in India. *Indian Journal of Medical Ethics*, 6(2), 112–118.
- Haider Mohammed Majeed, H. M., et al. (2024). Knowledge and awareness of organ donation among nursing students in Iraq. *Iraqi Journal of Nursing*, 16(1), 22–31.
- Hasan, H., Zehra, A., Riaz, L., & Riaz, R. (2019). Insight into the knowledge, attitude, practices, and barriers concerning organ donation amongst undergraduate students of Pakistan. *Cureus*, 11(8), e5577. <https://doi.org/10.7759/cureus.5577>
- Krishna, S., et al. (2024). Awareness and knowledge of organ donation in India: Focus on donor cards and brain death. *Journal of Clinical Nursing*, 33(5), 987–996.
- Luca Bertocchi, L., et al. (2025). Nursing students' knowledge and attitudes toward organ transplantation in Italy: A multicenter study. *Transplantation Reviews*, 39(2), 100722.
- Norlinda Abd Rashid, & Zurain Mohamad Amin. (2025). Knowledge, attitudes, and practices regarding organ donation among undergraduate nursing students in Malaysia. *Asian Nursing Research*, 19(1), 15–23.

Sonia Umair, et al. (2020). Awareness and attitudes toward posthumous organ donation among Pakistani university students. *Pakistan Journal of Health Sciences*, 14(4), 202–210.

W.W.S. Tam, et al. (2012). Knowledge and attitudes toward organ donation among nursing students in Hong Kong. *Transplantation Proceedings*, 44(3), 654–658.

Sayin Y, et al. Attitude and Knowledge of Intensive Care Nurses About Organ Donation. *Bezmialem Science*. 2024.