#### Sağlık Eğitimi Alan Öğrencilerin Organ Bağışına Yönelik Tutumları ile Bilgi Düzeyleri Arasındaki İlişkinin İncelenmesi

Investigation of the Relationship Between Health Education Students' Attitudes to Organ Donation and Their Knowledge Levels

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Özet: Amaç: Sağlık eğitimi alan öğrencilerin organ bağışına yönelik tutumları ile bilgi düzeyleri arasındaki ilişkinin incelenmesidir. Yöntem: Araştırma tanımlayıcı-ilişkisel tipte gerçekleştirilmiştir. Türkiye'nin doğusunda yer alan bir üniversitenin hemşirelik, beslenme ve diyetetik bölümlerinde öğrenim gören öğrenciler üzerinde yürütülmüştür. Veriler Eylül 2023'te toplanmıştır. Araştırmanın örneklemi 407 kişiden oluşmaktadır. Veriler Tanıtıcı Bilgi Formu, Organ Doku Bağışı ve Transplantasyon Bilgi Ölçeği (ODTKS) ve Organ Bağışına Yönelik Tutum Ölçeği kullanılarak toplanmıştır. Bulgular: Bireylerin Organ Doku Bağışı ve Nakli Bilgi Ölçeği ortancası ile Organ Bağışına Yönelik Tutum Ölçeği toplam puan ortalaması arasında pozitif ve anlamlı bir ilişki bulunmuştur (p<0,05). Yaş ile Organ Bağışına Yönelik Tutum Ölçeği toplam puan ortalaması arasında pozitif ve anlamlı bir ilişki bulunmuştur (p<0,05). Sonuç: Bireylerin organ bağışı bilgi düzeyleri ile organ bağışına yönelik tutumları arasında pozitif ve anlamlı bir ilişki bulunmuştur.

Anahtar Kelimeler: Tutum, Sağlık eğitimi, Organ bağışı, Öğrenci

**Abstract: Objective**: The aim of this study is to examine the relationship between the attitudes of health education students towards organ donation and their level of knowledge. Method: The research was conducted in a descriptive-correlational type. It was conducted on students studying in the departments of nursing, nutrition and dietetics at a university located in the east of Turkey. Data were collected in September 2023. The sample of the study consisted of 407 individuals. Data were collected using the Introductory Information Form, Organ Tissue Donation And Transplantation Knowledge Scale (ODTKS), and the Attitudes towards Organ Donation Scale. Results: positive and significant correlation was found between the median of the Individuals' Organ Tissue Donation And Transplantation Knowledge Scale and the total mean score of the Attitudes towards Organ Donation Scale (p<0.05). Positive and significant correlation was found between age and the total mean score of the Attitudes towards Organ Donation Scale (p<0.05). Conclusion: Positive and significant relationship was found between the individuals' level of organ donation knowledge and their attitudes towards organ donation.

Keywords: Attitude, Health education, Organ donation, Student

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### **INTRODUCTION**

Organ transplantation involves treating diseases by transferring organs from either living or deceased donors to replace damaged ones that are unable to function properly (Bezinover & Saner, 2019). surgical techniques Advances in and transplantation procedures have not only enhanced patient survival rates but also improved their overall quality of life (D'Souza et al., 2023). While organ transplantation is crucial for numerous medical conditions, the scarcity of available organs poses a significant challenge, leading to a shortfall in meeting the demand for transplants (Scheuher, 2016). Despite efforts to promote organ donation, there remains an ongoing insufficiency in fulfilling the transplantation needs (Meena et al., 2023).

Over the past decade, organ donation and transplantation have garnered significant global attention, both from governmental bodies and professional organizations, primarily due to escalating demand (Spardy et al., 2023). Presently, within the Eurotransplant organ sharing network, comprising over 70 transplant hospitals, there exists a collective waiting list of approximately 15,000 patients. Based on data from the 2022 International Registry of Organ Donation and Transplantation, the rate of organ donation stands at 41.6 per million population (pmp) in the United States of America, representing a notable increase compared to preceding years. In the same year, the top three countries in terms of successful organ donation rates were the USA, Spain, and Iceland, with rates of 41.6, 40.8, and 36.7 pmp, respectively. In contrast, Turkey recorded a significantly lower organ donation success rate of 3.6 pmp in 2022 (Tekin & Abdullayev, 2023). Consequently, augmenting the pool of organ donors is of paramount importance to address this pressing issue. Knowledge about organ donation plays a critical role in determining public awareness of organ donation. Individuals with a good level of knowledge generally have a better understanding of the importance and necessity of organ donation (Araujo & Siqueira, 2023). Therefore, societies

with adequate knowledge about organ donation tend to have higher rates of organ donation. The level of public awareness is directly related to the level of knowledge about organ donation (Potenza et al., 2015). As the level of knowledge increases, positive attitudes and willingness to donate organs are likely to increase. Therefore, increasing the level of knowledge is an important step to increase public awareness about organ donation (Bas-Sarmiento et al., 2023).

The objective of this study was to assess the knowledge and attitudes of health education students regarding organ donation. Given the absence of research in existing literature exploring the correlation between the knowledge level and attitudes of health education students, it is anticipated that this study will provide valuable insights to the field.

### **MATERIAL and METHOD**

#### **Research Type**

The research was conducted in descriptive and correlational type. The STROBE guideline was used in the reporting of this research article (Vandenbroucke et al., 2007).

#### **Place and Time of Research**

The research was carried out with students studying in the departments of nursing and nutrition dietietics at a university located in the east of Turkey. Data were collected in September 2023.

#### Population and Sample of the Research

The population of the research consisted of all students who were registered to the specified departments of the relevant university and who were active students. No sampling calculation was used in the study, and all individuals who met the sample selection criteria and agreed to participate in the study were included in the sample (n=407).

#### **Inclusion Criteria**

- To be a student in one of the health departments
- Being a regular student
- 18 years of age or older

#### **Exclusion Criteria**

- Enrollment in a department other than health-related fields.
- Lack of voluntary participation.
- Presence of health issues.

#### **Data Collection Tools**

Introductory Information Form, Organ Tissue Donation And Transplantation Knowledge Scale (ODTKS), and Attitudes towards Organ Donation Scale were used to collect research data.

Introductory information form: This form has been prepared by the researchers considering the literature information. It consists of 12 questions questioning the socio-demographic characteristics of individuals.

Organ tissue donation and transplantation knowledge scale (ODTKS): It is a 17-item scale that measures the knowledge level of people about organ donation and transplantation, prepared by Emiral et al (Emiral et al., 2017). For questions 1, 3, 4, 5, 7, 11, 12, 14, 16, the correct option is evaluated as 1 point and the other options are evaluated as 0 points. For the other questions of the scale, the wrong option is accepted as 1 point and the other options are accepted as 0 points. The scores obtained from each question of the scale are summed to obtain the total score of the scale. The lowest score that can be obtained in the scale is 0 and the highest score is 17, and an increase in the score is considered to increase the level of knowledge about organ donation and transplantation. In our study, the Cronbach Alpha value was found to be 0.73.

Attitudes towards organ donation scale: It is a scale consisting of 15 questions prepared by Kaca et al. (2009) and evaluating the evaluations of individuals about organ donation within the framework of planned behavior theory (PBT) (Kaça et al., 2009). The first 14 questions are in 7point Likert type and the 15th question consists of 2 options. Questions 1-3 assess people's behavioral intentions about organ donation, questions 4-8 assess people's attitudes towards organ donation, questions 9-11 assess subjective norms, questions

12-14 assess perceived behavioral control. It is questioned whether he will do the behavior related to the 15th question at that moment. For questions 1, 2, 3, 5, 6, 9, 10, 11, 12, 13, 14 I strongly disagree 1, mostly disagree 2, disagree 3, undecided 4, somewhat agree 5, agree 6, strongly agree 7 points is evaluated as. For the other questions of the scale, it is evaluated as 1 strongly agree, 2 mostly agree, 3 disagree, 4 undecided, 5 disagree, 6 mostly disagree, 7 points for strongly disagree. The scores obtained from the questions in the relevant area of the scale are summed to obtain the total score of the relevant area of the scale. An increase in the score is considered as positively affecting the relevant area. In our study, the Cronbach Alpha value was found to be 0.84.

### **Data Collection**

The data were collected online by the researchers after obtaining the necessary ethics committee and institutional permissions. Data collection forms were applied to individuals who voluntarily agreed to participate in the study.

### **Study Variables**

The independent variables of the research are the introductory information form consisting of questions such as age, gender, marital status, department, and class. Its dependent variables are the mean scores of the Organ Tissue Donation And Transplantation Knowledge Scale (ODTKS) and the Attitudes towards Organ Donation Scale.

### **Data Analysis**

The analysis of the data was made using the SPSS statistical package program on the computer. Independent Samples t, One-Way Variance (ANOVA), Mann Whitney U, Kruskall Wallis Test, Bonferroni, Games-Howell and Pearson and Spearman correlation tests were used to evaluate the data. In the research, descriptive features are presented with the number (n) and percentage (%). Continuous variables are specified with their mean, standard deviation, minimum and maximum values. Necessary normality tests were performed in the process of analyzing the data and it was understood that the data showed normal distribution (kurtosis and skewness -1.5 to +1.5) (Tabachnick et al., 2007). In paired comparisons of multiple groups, one of the post-hoc tests, the Bonferroni test was used for homogeneous distribution and Games-Howell and Dunn for nonhomogeneous data. Pearson and Spearman correlation test was used to determine the linear relationship between variables and severity of the relationship. A p-value of <0.05 was considered statistically significant.

### **Ethical Principles**

Before starting the research, approval from the XXX University Ethics Committee (28.09.2023, 190) and written permission from the management of the department where the research was conducted were obtained. During the data collection process, the individuals were informed about the research and the "Informed Consent Policy" was given, stating that they were free to participate in the research, the "Respect for Autonomy Principle", and the individuals participating in the research were informed about confidentiality and the the "Privacy And Confidentiality Protection Policy" was met and written consent was obtained. Those who were willing to participate in the research were included in the research. Since individual rights should be protected in the research, the Helsinki Declaration of Human Rights was adhered to throughout the study.

### Limitations and Generalizability of the Study

The fact that this study was conducted on health education students of a university can be considered as a limitation. The results of the research can be generalized to the individuals studying in the relevant departments in the university region where the research was conducted.

# RESULTS

It was determined that 81.6% of the students participating in the study were women, 96.3% were single, 50.1% were nutrition and dietetics, 34.2% were sophomores, and 75.9% of them were income equal to their expenses, 91.4% did not have a chronic disease, 92.1% thought that their religious beliefs did not prevent organ donation, and 73.2% of them did not have a need for organ donation in their relatives, 90.2% of them could donate their organs to an individual with a different belief, 96.8% would accept if they needed an organ transplant, 63.4% learned about organ donation from social media, and the mean age was  $21.36\pm 2.27$  (years) (Table 1).

It was found that Attitude towards Organ Donation Scale Total Score Mean was  $66.12\pm13.47$ , and its sub-dimensions; The mean score of behavioral intention about organ donation was  $14.93\pm5.01$ , mean score of attitudes towards organ donation was  $28.45\pm5.85$ , mean score of subjective norms was  $8.48\pm3.58$ , mean score of perceived behavioral control was  $14.24\pm4.20$ . In our study, the individuals' Organ-Tissue Donation and Transplantation Knowledge Level Scale Median (IQR) was 13.0 (3.0) (Table 2).

There was a significant difference between the median of the Organ Donation Knowledge Level of the Individuals and the department, the expressions of thinking that their religious beliefs prevent organ donation and donating their organs to an individual with a different belief (p<0.05).

Demographic features		n	%		
Gender	Male	75	18.4		
	Female	332	81.6		
Marital status	Married	15	3.7		
	Single	392	96.3		
Dementary	Nursing	203	49.9		
Department	Married15Single $392$ Nursing $203$ Nutrition and Dietetics $204$ $1^{st}$ Grade $119$ $2^{nd}$ Grade $139$ $3^{rd}$ Grade $70$ $4^{th}$ Grade $79$ My income is less than my expenses $81$ My income is equal to my expenses $309$ My income is more than my expenses $17$ Yes $35$ No $372$ on?Yes $32$ No $375$ ion?Yes $109$ No $298$ Yes $367$ No $40$ acceptYes $394$	50.1			
	1 <sup>st</sup> Grade	119	29.2		
Create	2 <sup>nd</sup> Grade	139	34.2		
Grade	3 <sup>rd</sup> Grade	70	17.2		
	4 <sup>th</sup> Grade	79	19.4		
monthly income status	My income is less than my expenses	81	19.9		
	My income is equal to my expenses	309	75.9		
	My income is more than my expenses	17	4.2		
Do you have any chronic diseases?	Yes	35	8.6		
	No	372	91.4		
Do your religious beliefs prevent organ donation?	Yes	32	7.9		
	No	375	92.1		
Have any of your relatives needed organ donation?	Yes	109	26.8		
	No	298	73.2		
Would you donate your organs to a person of	Yes	367	90.2		
different faith?	No	40	9.8		
If you needed an organ transplant, would you accept	Yes	394	96.8		
it?	No	13	3.2		
From whom did you get information about organ	Health personnel	119	29.2		
donation?	Social media	258	63.4		
	Circle of friends	30	7.4		
	$\overline{X}$ ±SD (Min-	Max)			
Age	21.36±2.27 (18-35)				

**Table 1.** Descriptive characteristics of the students (n=407)

**Table 2.** Students' total and sub-dimension scores of the organ tissue donation and transplantation knowledge scale and the attitude scale towards organ donation (n=407)

Scales	$\overline{X} \pm SD$	Min	Max	
Attitude Towards Organ Donation Total Score Mean	66.12±13.47	21	92	
Behavioral intent on organ donation mean score	$14.93 \pm 5.01$	3	21	
Mean score of attitudes towards organ donation	28.45±5.85	5	35	
Subjective norms mean score	$8.48 \pm 3.58$	3	21	
Perceived behavioral control mean score	$14.24 \pm 4.20$	4	21	
		Median (IQR)		
Organ Tissue Donation And Transplantation Knowledge		13.0 (3.0)		
Scale Total Score Mean				

A significant difference was found between the total mean score of the Individuals' Attitudes towards Organ Donation Scale and the department, class, thinking that their religious beliefs prevent organ donation, statements about donating their organs to an individual with a different belief, and the place where they received information about organ transplantation (p<0.05) (Table 3).

In the post-hoc (Games Howell) analysis performed to determine which group caused the difference between the total mean score of the Attitudes towards Organ Donation Scale and the class, it was determined that the mean score of the 4th grade students was higher than the mean score of all groups.

In the post-hoc (Bonferroni) analysis performed to determine the difference between the total score of the Attitudes towards Organ Donation Scale and the place where they received information about organ transplantation, it was determined that the mean score of those who received the information from the health personnel was higher than the mean score of all groups.

			Organ Donation Knowledge Level Scale		Attitudes tov Donatio		
Demographic features		n	Median (IQR)	Test and Significance	$\overline{X} \pm SD$	Test and Significance	
Gender Male		75	13.0 (5.0)	U=11560.01	64.01±14.66	t=-1.512	
	Female	332	12.0 (3.0)	p=0.330	66.59±13.16	p=0.131	
Marital status	Married	15	13.0 (3.0)	U=2815.50	$67.80{\pm}10.85$	t=0.492	
	Single	392	12.5 (4.0)	p=0.779	66.05±13.57	p=0.623	
	Nursing	203	12.0 (4.0)		64.25±14.54	•	
Department	Nutrition and	204	13.0 (3.0)	U=17572.50	67.97±12.06	t=-2.808	
•	Dietetics			p=0.008		p=0.005	
	1 <sup>st</sup> Grade	119	12.0 (3.0)	-	64.47±15.38	-	
	2 <sup>nd</sup> Grade	139	12.0 (4.0)		64.94±12.97		
Grade	3 <sup>rd</sup> Grade	70	13.0 (3.0)	KW=13.911	65.18±10.95	F=5.443	
	4th Grade	79	13.0 (3.0)	p=0.177	71.50±12.07	p=0001	
Monthly income status	My income is less	81	13.0 (4.0)	•	64.32±13.94	-	
-	than my expenses			KW=8.577		F=1.714	
	My income is equal to my expenses	309	12.0 (3.0)	p=0.573	66.78±13.14	p=0.182	
	My income is more than my expenses	17	13.0 (3.5)		62.52±16.32		
Do you have any chronic	Yes	35	13.0 (4.0)		66.17±11.95		
diseases?	No	372	12.0 (3.0)	U=6253.01	66.11±13.62	t=0.203	
discuses.			()	p=0.697		p=0.981	
Do your religious beliefs	Yes	32	12.0 (2.75)	U=4026.50	60.31±15.22	t=-2.558	
prevent organ donation?	No	375	13.0 (3.0)	p=0.002	66.61±13.21	p=0.011	
Have any of your relatives	Yes	109	13.0 (3.5)	U=15671.50	67.21±13.27	t=0.988	
needed organ donation?	No	298	12.0 (3.0)	p=0.585	65.72±13.54	p=0.324	
Would you donate your organs	Yes	367	13.0 (3.0)	U=5494.50	67.44±12.85	t=6.127	
to a person of different faith?	No	40	11.0 (3.75)	p=0.009	54.25±13.38	p=0.001	
If you needed an organ	Yes	394	13.0 (3.0)	U=2200.01	66.48±13.38	t=3.012	
transplant, would you accept it?	No	13	12.0 (4.0)	p=0.384	55.15±11.80	p=0.003	
From whom did you get	Health personnel	119	13.0 (3.0)	KW=11.799	70.34±13.53	F=9.107	
information about organ	Social media	258	12.5 (3.0)	p=0.299	64.64±13.30	p=0.001	
donation?	Circle of friends	30	12.0 (4.0)	1	62.06±14.66		

**Table 3.** Comparison of demographic characteristics of the students with organ tissue donation and transplantation knowledge scale, attitudes towards organ donation scale and total mean scores (n=407)

**Table 4.** The relationship between total and sub-dimensional mean scores of students' age, organ donation knowledge scale, attitude towards organ donation scale (n=407)

		(1)	(2)	(3)	(4)	(5)	(6)	(7)
(1) Organ Tissue Donation and Transplantation Knowledge Scale	r	-						
Median	р	-						
(2) Attitude towards organ donation total score mean	r	.149						
	р	.003						
(3) Intent score mean		.146	.859					
	р	.003	.001					
(4) Mean score of attitudes towards organ donation	r	.234	.774	.578*				
-	р	.001	.001	.001				
(5) Subjective norms mean score		-	.410	.247	028			
-	р	.127	.001	.001	.571			
	-	.010						
(6) Perceived behavioral control mean score		.084	.753	.545	.420	.209		
	р	.090	.001	.001	.001	.001		
(7) Age	r	-	.132	.045	.106	.112	.126	
	р	.026	.008	.370	.033	.023	.011	
	-	.606						

A positive and significant correlation was found between the median of the Individuals' Knowledge Level of Organ Donation Scale and the total mean score of the Attitudes towards Organ Donation Scale (p<0.05). A positive and significant correlation was found between age and the total mean score of the Attitudes towards Organ Donation Scale (p<0.05) (Table 4).

# DISCUSSION

Inadequate organ donation is a major problem in our country as well as all over the world. It is very important to encourage organ transplantation and to eliminate the lack of information and concerns of individuals about organ transplantation. In this section, the findings are discussed in the light of the literature.

In our study, the total mean score of the Individuals' Attitude Scale towards Organ Donation was found to be  $66.12\pm13.47$ . An increase in the score obtained from the scale is considered to be positively affecting the relevant area. This finding is similar to the study conducted by Karakas in 2018 (Karakaş, 2018). In a study conducted by Ordin et al., the Total Score Mean of the Attitude Scale towards Organ donation was found to be  $103.85\pm13.83$  (Ordin et al., 2018).

A significant difference was found between individuals' Attitudes towards Organ Donation Scale score and those whose departments were nutrition and dietetics (p<0.05). This difference shows parallelism with the Organ Donation Knowledge Level of the individuals. In the study conducted by Yazici Sayin (2015) with a sample of 84.4% 30-35 years old, 50.4% women and 49.7% primary school graduates, the mean score of positive attitude towards organ donation was lower than our study (Yazici Sayin, 2016). In the literature, it is emphasized that the awareness and sensitivity of health science students about organ donation should be better (Rykhoff et al., 2010). The steps taken in this direction may be the main reason for the attitude between nursing and nutrition and dietetics students.

Significant differences were observed in the mean Organ Donation Knowledge Level scores among individuals based on their field of study, particularly in nutrition and dietetics (p<0.05). In a study conducted by Ibrahimoglu and Urhan in 2019 with healthcare professionals, it was found that 98.2% of healthcare professionals knew the definition of organ donation and brain death correctly, but the level of participation in organ donation remained at 21.4% (İbrahimoğlu & Urhan, 2019). In a study by Balci and Sahingoz, it was determined that 98.1% of the nurses did not donate organs (Balcı & Şahingöz, 2014). In a study conducted by Sipkin et al. in 2008, the rate of those who did not donate organs among the faculty members participating in the study was 86.6% (Şıpkın et al., 2010). Knowledge of organ and tissue donation plays an important role in making donations (Abdullah et al., 2022). It has been clarified in studies that those who want to donate organs generally understand general information about transplantation and the transplantation process (Ghose et al., 2021; Kocaay et al., 2015). The reason for the current difference may be due to the different course contents of the departments.

There was a significant difference between the individuals' Attitudes towards Organ Donation Scale mean score and their grade (p<0.05). In the post-hoc (Games Howell) analysis performed to determine which group caused the difference between the total mean score of the Attitudes towards Organ Donation Scale and the class, it was determined that the mean score of 4th grade students was higher than the mean score of all groups. The reason for this difference can be shown as the increase in the professional knowledge level of students receiving health education at the undergraduate level every year. This finding is in parallel with the literatüre (Tam et al., 2012; Vicdan et al., 2011).

A significant difference was found in the mean scores of the Attitudes towards Organ Donation Scale among individuals whose religious beliefs did not prohibit organ donation (p<0.05). In some societies, adequate organ donation cannot be due to the religious provided or more predominantly cultural approach that does not consider it appropriate to disrupt the body integrity of the deceased (Yaşar et al., 2008). Consistent with this, other studies (Kaça et al., 2009; Koçak et al., 2010) show that the number of people who find organ donation religiously objectionable has decreased. In the study conducted by Randhawa and Neuberger (2016), they found that organ donation is more important than the beliefs of the individual (Randhawa & Neuberger, 2016). This finding is in parallel with our study.

A significant difference was observed in the mean scores of the Organ Donation Knowledge Scale among individuals whose religious beliefs did not prohibit organ donation (p<0.05). In a study conducted by Aytas et al. in 2011, it was found that religious beliefs reduce the idea of organ donation (Aytaş et al., 2011). In a study conducted by Ozsoy et al. in 2021, the effect of religion on opinions about organ donation and transplantation was investigated and it was determined that individuals had concerns about the violation of bodily integrity, ill-treatment of the deceased, and the belief that this was incompatible with religion (Ozsoy et al., 2021).

A significant difference was found between the mean scores of the individuals' attitude scale towards organ donation and the possibility of accepting the need for organ transplantation (p<0.05). The study conducted by Darwish et al. in a Muslim society in 2020 shows parallelism with our findings (Darwish et al.) Improvements in the attitude towards organ donation bring about acceptance in case of need.

There was a significant difference between individuals' attitude scale towards organ donation mean scores and from whom they received information about organ donation (p<0.05). The fact that students who receive undergraduate health education receive the information they have obtained from health personnel has enabled them to have more competent knowledge about organ donation and shows that it has a positive effect on their attitudes. In the literature, it is stated that the education given in schools positively affects the attitude towards organ donation (Byrne et al., 2021; Byrne et al., 2019).

A positive and significant correlation was found between the median of the Individuals' of Organ Donation Knowledge Level Scale and the total mean score of the Attitudes towards Organ Donation Scale. Obtaining such a result supports the above findings (p<0.05). In a study conducted with medical school students in the Netherlands, it was determined that 59% of the students donated their organs and 80% wanted to donate their organs (Figueroa et al., 2013). In another study conducted with medical school students in Greece, 5.2% of the students declared that they donated their organs, and 93.6% stated that they wanted to donate their organs (Dardavessis et al., 2011). As the level of knowledge about organ donation increases, positive changes are observed in the attitude.

A positive and significant correlation was found between age and the total mean score of the Attitude Scale towards Organ Donation (p<0.05). In the study by Kobus et al, in which the effect of religion and age factors on the attitude towards organ transplantation, it was found that the attitude was positively affected as the age increased, supporting our findings (Kobus et al., 2016).

# CONCLUSION

A positive and significant correlation was found between age and the total mean score of the Attitudes towards Organ Donation Scale (p<0.05). A positive and significant relationship was found between the individuals' level of organ donation knowledge and their attitudes towards organ donation. It is recommended that the study be conducted on larger groups.

# **Contributions of the Study**

Academic: This study enriches the literature by exploring the link between knowledge levels and attitudes toward organ donation among health education students, filling a critical gap in understanding how education impacts organ donation advocacy.

**Clinical:** Highlights the need for integrating organ donation education in healthcare training, emphasizing its potential to improve attitudes and increase future healthcare professionals' role in public awareness and advocacy.

**Practical/Educational:** Provides a foundation for curriculum development and targeted training

programs, enabling healthcare students to address misconceptions and cultural concerns, ultimately promoting organ donation awareness and participation.

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