

Approach to Cadavers Used in Anatomy Education: Dead Body Privacy and Medical Ethics

Anatomi Eğitiminde Kullanılan Kadavralara Yaklaşım: Ölü Beden Mahremiyeti ve Tıp Etiği

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Abstract

Background: The human cadavers have been the most valuable educational tool for medical students to learn the anatomical structures belonging to human body and to study on by touching and dissecting the real tissues and organs. It also important that the medical students to take a sensitive approach on cadavers and respect their privacy. The aim of the study was to evaluate and compare the opinions of the students attending the Faculty of Medicine of Bursa Uludag University and the anatomists of Turkish Universities in terms of medical ethics and raise the awareness of the confidentialities of the dead bodies.

Materials and Methods: A questionnaire, consisting of 23 questions were prepared using reliable and private online forms and shared with the students and academicians. SPSS 22.0 software package was used for the statistical analyses.

Results: The questionnaire were answered by 89 anatomists in Turkey and 553 students who have been attending Bursa Uludag University Faculty of Medicine. Statistically significance was observed in six different topics among 15 questions about approaching cadavers and dead body privacy between groups.

Conclusion: Cadavers, as the most valuable educational tools in anatomy education, are a part of a subject that must be meticulously focused on privacy and moral values. As it is seen from the answers privacy of dead bodies is one of the most important issues in relation to the human anatomy education.

Keywords: Anatomy, Cadaver, Medical students, Medical ethics

ÖZ

Amaç: İnsan kadavraları, tıp öğrencilerinin insan vücuduna ait anatomik yapıları öğrenmeleri, gerçek doku ve organlara dokunarak ve inceleyerek üzerinde çalışabilmeleri için en değerli eğitim aracı olmuştur. Tıp öğrencilerinin kadavra konusunda duyarlı olmaları ve mahremiyete saygı göstermeleri önemlidir. Araştırmanın amacı, Bursa Uludağ Üniversitesi Tıp Fakültesi'ne devam eden öğrenciler ile Türkiye'deki üniversitelerdeki anatomistlerin görüşlerini tıp etiği açısından değerlendirip karşılaştırmak ve cenazenin mahremiyeti konusunda farkındalık yaratmaktır.

Gereç ve Yöntem: Güvenilir ve özel çevrimiçi formlar kullanılarak 23 sorudan oluşan bir anket hazırlanarak öğrenciler ve akademisyenler ile paylaşılmıştır. İstatistiksel analizler için SPSS 22.0 paket programı kullanılmıştır.

Bulgular: Bursa Uludağ Üniversitesi Tıp Fakültesi'ne devam eden 553 öğrenci ile Türkiye'deki 89 anatomist anket formlarını yanıtladı. Kadavra yaklaşım ve ölü beden mahremiyeti ile ilgili 15 sorudan altı farklı soruda gruplar arasında istatistiksel olarak anlamlılık gözlemlendi.

Sonuç: Anatomi eğitiminde en değerli eğitim aracı olan kadavralar, mahremiyet ve ahlaki değerler üzerinde titizlikle durulması gereken bir konunun parçasıdır. Cevaplardan da anlaşılacağı gibi, insan anatomisi eğitimi ile ilgili en önemli konulardan biri de ölü bedenlerin mahremiyetidir.

Anahtar kelimeler: Anatomi, Kadavra, Tıp öğrencileri, Tıp etiği

Introduction

Among the medical disciplines, anatomical sciences have been one of the cornerstones of the medical education and the oldest branches of basic medical sciences. By studying and / or observing the details of the human body, the students can be able to learn the relationships between the anatomical structures and their basic functions (1-3).

It has been believed that the cadaver dissections contributed the anatomy knowledge three dimensionally, and additionally it also advanced the essential surgical skills and attitudes in the name of professionalism in terms of patient-physician relationships, ethics and moral values (4-6).

Providing the cadavers for dissection studies and medical education has been appeared to be most important difficulty or problem in the anatomical sciences since the beginning. To solve this problem, the dead bodies of criminals were used for a long time. Due to that, after the social reactions related to using the corpses of criminals, unclaimed peoples' bodies after death were began to be used as an alternative way. This solution has also brought new ethical debates with it on the point of whether the poor and unclaimed people in the society have been informally abused in the name of science. Since half of 20th century, donated bodies by volunteers have become a most accurate and legal source of obtaining cadaver as a solution to the ethical debates (7).

Anatomy education has been more effective in practice way but the lack of access to cadaver has been leded the different methods in education like social media in order to reach more people. Using social media in anatomy education has brought a debate on dead body privacy, ethical, moral and legal aspects about sharing the human remains with the public (8).

Cadaver dissection or studying on a dissected cadaver has been essential at anatomy learning for medical students. As we know, the limitations of obtaining the cadavers, increasing numbers of students and fewer materials lead the students to take pictures of cadavers at laboratories to study later and has leded to share with other students. Using the social media networks has brought some ethical debates when the cadaver images were shared and stored in virtual places. It can be considered that those situations might cause a decrease of the body donating for scientific or educational purposes. The aim of this study was to evaluate the thoughts of the medical students of the Bursa Uludag University and academicians in anatomy departments of different universities in Turkey and to increase awareness about dead body privacy with the collaboration of Anatomy and Medical Ethics departments.

Material and Method

Questionnaire form:

Two different groups that included in the study were the students attending the Faculty of Medicine of Bursa Uludag University and faculty members and assistants of anatomy departments in different medical faculties of

Turkish Universities. Two separate questionnaire forms prepared to contain a set of three questions for demographic information (Part A), four questions about using cadaver at anatomy learning and medical ethics education (Part B) and fifteen questions to get the thoughts about approaching to cadaver used at anatomy education and dead body privacy (Part C) were prepared. The questions of the part C were formed as compatible to 5-point Likert Scale.

Data Collection 1: Faculty members and assistants of anatomy departments

The first questionnaire form approved by Uludag University Medical Faculty Clinical Research Ethics Committee Decision dated on 04.07.2017 and numbered 2017-10/33 prior to the study. The form has been made accessible on internet with the link address <https://goo.gl/forms/5iXMa0zvByw7DYoz1> and the address was shared only by voluntary participants.

Data Collection 2: Students of Faculty of Medicine of Uludag University

The second questionnaire form approved by Uludag University Medical Faculty Clinical Research Ethics Committee Decision (04.07.2017-2017-10/34), was used for grades 1 to 6 students of Faculty of Medicine of Uludag University. The form has been made accessible on internet with the link address "<https://goo.gl/forms/dPbqVgoQDWpD9vDr1>", the address was shared only by voluntary participants. SPSS 22.0 (Statistical Package for the Social Sciences) was performed for statistical analysis.

The frequency analyses were used for the answers given and Student's t-test were performed for comparing the answers of two groups.

Results

A: Demographic Information:

1. Faculty members and assistants of Anatomy departments

The questionnaire was answered by 89 anatomy academicians (42 males (47.2%), 47 females (52.8%) from 29 different universities in Turkey. Distribution of academic title was given in figure 1 and age distribution in figure 2.

2. Students of Faculty of Medicine of Bursa Uludag University

The questionnaire form was answered by 553 students (272 males (49.2%), 281 females (50.8%). Distribution of grades was given in figure 3 and age distribution in figure 4.

B: Using the cadavers at anatomy learning and medical ethics education:

The answers of questions about using the cadavers at anatomy learning and questions related to their medical ethics education were given in table 1.

Table 1. The answers about using the cadavers at anatomy education and the answers related to their medical ethics education

Questions	Faculty members and assistants (n=89)		Students (n=553)	
	Yes	No	Yes	No
1. Did you dissect cadaver at your anatomy education?	85.4%	14.6%	83.4%	16.6%
2. Did you use dissected cadaver at your anatomy practice classes?	92.1%	7.9%	96.7%	3.3%
3. Do you use cadaver at anatomy education at your school?	96.6%	3.4%	98.7%	1.3%
4. Did you study medical ethics during your education?	68.5%	31.5%	96%	4%

C: Thoughts about approaching to a cadaver used in anatomy education and dead body privacy:

The great majority of respondents of both faculty members and assistants of anatomical sciences (89.9%) and students (78.8%) strongly agreed that the human body must be valued and respected during life and after death because of human is a valuable asset. On the point of sharing photographs or videos taken with cadavers in social media, both anatomy academicians/assistants and students stated that they are strongly disagree about that subject (83.1% and 70.2%, respectively) (Table 2, Table 3). When the scores of the answers given by anatomy academicians/assistants and students compared (Table 4), it was observed that there was strongly statistically

significant difference between two groups on the issues of “The cadaver should be in a more respected position because of the training anatomy education contribution” (p< 0.001), “The point of view towards the cadaver is as sensitive and important as approaching the patient” (p< 0.001), “I warn the people who share cadaver images in social media” (p< 0.001), “Cadaver dissections should not be performed except in the anatomy laboratories or surgical sciences in hospitals” (p=0.001), “Sharing the photos / videos including cadaver images” (p=0.002), “The acquisition of the sense of ethics and privacy related to the cadaver is important in terms of medical ethics and patient privacy” (p=0.001).

Table 2. Thoughts of the academicians/assistants about approaching to cadaver used at anatomy education and dead body privacy

Questions	Strongly Disagree	Disagree	Undecided	Agree	Strongly Agree
1. Human is a valuable asset. For this reason, the human body must be valued and respected during life and after death.	1.1%	1.1%	0%	7.9%	89.9%
2. Even if a cadaver is a lifeless body. it is necessary to respect his privacy.	1.1%	2.2%	3.4%	11.2%	82%
3. The cadaver should be in a more respected position because it contributes to anatomy education.	1.1%	1.1%	2.2%	12.4%	83.1%
4. The point of view towards the cadaver is as sensitive and important as approaching the patient.	1.1%	2.2%	2.2%	2.5%	71.9%
5. On the right of privacy, covering the face of the cadaver during the dissection is a human delicacy that should not be neglected.	4.5%	9%	21.3%	31.5%	33.7%
6. Memories taken from cadavers can be shared in social media (Facebook, Instagram, Twitter, snapchat, etc.).	83.1%	9%	5.6%	1.1%	1.1%
7. Cadaver dissections can be performed outside of anatomy rooms or surgical units in hospitals (congress centre, hotel, etc.).	59.6%	20.2%	7.9%	7.9%	4.5%
8. It makes me uncomfortable to see the photo or video of my acquaintance, who has donated his body, in social media.	0%	3.4%	6.7%	19.1%	70.8%
9. I warn the people who share cadaver images in social media.	1.1%	1.1%	7.9%	29.2%	60.7%
10. Cadaver dissections should not be performed except in the anatomy laboratories or surgical sciences in hospitals.	2.2%	5.6%	5.6%	23.6%	62.9%
11. Sharing the photos / videos including cadaver images on social media is not ethical.	0%	1.1%	5.6%	15.7%	77.5%
12. I would prefer to dissect the donated body	2.2%	6.7%	29.2%	34.8%	27%
13. I would prefer to dissect the body belonging unclaimed	9%	25.8%	50.6%	12.4%	2.2%
14. The acquisition of the sense of ethics and privacy	0%	0%	3.4%	24.7%	71.9%

related to the cadaver is important in terms of medical ethics and patient privacy.					
15. Sharing cadaver photos / videos on social media negatively affects cadaver donation.	2.2%	2.2%	7.9%	29.2%	58.4%

Additionally, statistically significant difference was observed on the topics of “Human is a valuable asset. For this reason, the human body must be valued and respected during life and after death” (p=0.027), “Even if a cadaver is a lifeless body, it is necessary to respect his privacy”

(p=0.028), “Memories taken from cadavers can be shared in social media” (p=0.047), “Cadaver dissections can be performed outside of anatomy rooms or surgical units in hospitals (congress centre, hotel, etc.)” (p=0.023) (Table4).

Table3. Thoughts of the students about approaching to cadaver used at anatomy education and dead body privacy.

Questions	Strongly Disagree	Disagree	Undecided	Agree	Strongly Agree
1. Human is a valuable asset. For this reason, the human body must be valued and respected during life and after death.	2%	1.3%	1.6%	16.3%	78.8%
2. Even if a cadaver is a lifeless body, it is necessary to respect his privacy.	2.4%	2.9%	4.3%	21.9%	68.5%
3. The cadaver should be in a more respected position because of the training anatomy education contribution.	2%	2.7%	2.5%	34.0%	56.8%
4. The point of view towards the cadaver is as sensitive and important as approaching the patient.	1.8%	8.3%	4.1%	34.5%	41.2%
5. On the right of privacy, covering the face of the cadaver during the dissection is a human delicacy that should not be neglected.	5.2%	13%	26%	26.8%	28.9%
6. Memories taken from cadavers can be shared in social media (Facebook, Instagram, Twitter, snapchat, etc.).	70.2%	20.3%	5.4%	2.7%	1.4%
7. Cadaver dissections can be performed outside of anatomy rooms or surgical units in hospitals (congress centre, hotel, etc.).	35.6%	35.8%	16.1%	9.9%	2.5%
8. It makes me uncomfortable to see the photo or video of my acquaintance, who has donated his body, in social media.	2.4%	3.6%	6.0%	26%	62%
9. I warn the people who share cadaver images in social media.	2%	4.7%	20.3%	44.3%	28.8%
10. Cadaver dissections should not be performed except in the anatomy laboratories or surgical sciences in hospitals.	2.2%	6.9%	15.7%	38.7%	36.1%
11. Sharing the photos / videos including cadaver images on social media is not ethical.	1.8%	2.2%	5.8%	29.3%	60.9%
12. I would prefer to dissect the donated body	1.1%	4.5%	25.1%	40.9%	28.4%
13. I would prefer to dissect the body belonging unclaimed	12.3%	28.9%	47.4%	9.2%	2%
14. The acquisition of the sense of ethics and privacy related to the cadaver is important in terms of medical ethics and patient privacy.	0.9%	0.9%	4.5%	37.3%	56.4%
15. Sharing cadaver photos / videos on social media negatively affects cadaver donation.	1.4%	3.4%	8.9%	34.5%	51.7%

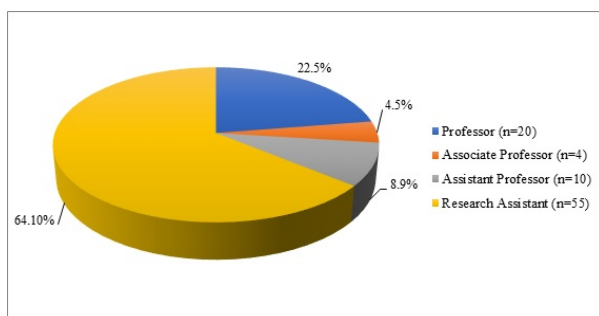


Figure 1. Distribution of academic titles

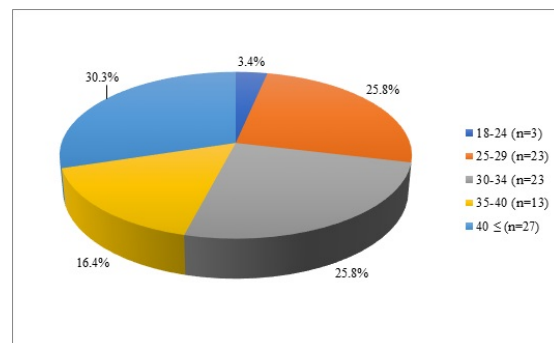


Figure 2. Age distribution of assistants and members of different faculties

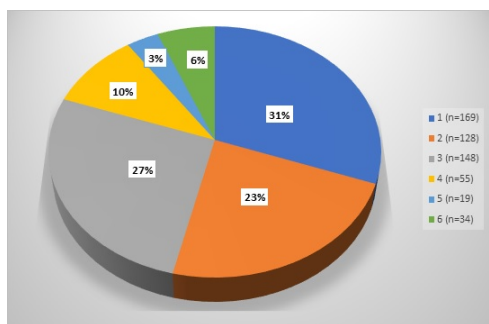


Figure 3. Distribution of grades

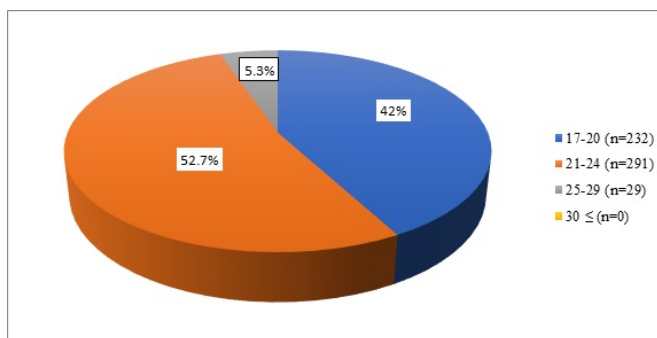


Figure 4. Age distribution of the students

Table 4. Comparison of the answers given by anatomy academicians and students

Questions	Anatomy Academicians (n=89)	Students (n=553)	p
	Mean \pm S.D.	Mean \pm S.D.	
1. Human is a valuable asset. For this reason, the human body must be valued and respected during life and after death.	4.84 \pm 0.58	4.68 \pm 0.75	0.027
2. Even if a cadaver is a lifeless body, it is necessary to respect his privacy.	4.70 \pm 0.74	4.51 \pm 0.89	0.028
3. The cadaver should be in a more respected position because it contributes to anatomy education.	4.75 \pm 0.66	4.41 \pm 0.85	<0.001
4. The point of view towards the cadaver is as sensitive and important as approaching the patient.	4.61 \pm 0.74	4.05 \pm 1.02	<0.001
5. On the right of privacy, covering the face of the cadaver during the dissection is a human delicacy that should not be neglected.	3.81 \pm 1.13	3.61 \pm 1.18	0.132
6. Memories taken from cadavers can be shared in social media (Facebook, Instagram, Twitter, snapchat, etc.).	1.28 \pm 0.72	1.45 \pm 0.83	0.047
7. Cadaver dissections can be performed outside of anatomy rooms or surgical units in hospitals (congress centre, hotel, etc.).	1.77 \pm 1.16	2.07 \pm 1.06	0.023
8. It makes me uncomfortable to see the photo or video of my acquaintance, who has donated his body, in social media.	4.57 \pm 0.76	4.41 \pm 0.92	0.088
9. I warn the people who share cadaver images in social media.	4.47 \pm 0.78	3.93 \pm 0.92	<0.001
10. Cadaver dissections should not be performed except in the anatomy laboratories or surgical sciences in hospitals.	4.39 \pm 0.98	4.01 \pm 0.99	0.001
11. Sharing the photos / videos including cadaver images on social media is not ethical.	4.69 \pm 0.62	4.45 \pm 0.84	0.002
12. I would prefer to dissect the donated body	3.77 \pm 0.99	3.91 \pm 0.89	0.235
13. I would prefer to dissect the body belonging unclaimed	2.73 \pm 0.87	2.59 \pm 0.89	0.174
14. The acquisition of the sense of ethics and privacy related to the cadaver is important in terms of medical ethics and patient privacy.	4.68 \pm 0.53	4.47 \pm 0.71	0.001
15. Sharing cadaver photos / videos on social media negatively affects cadaver donation.	4.39 \pm 0.89	4.31 \pm 0.68	0.455

Table 5. Similar questions of current study, Erbay et al. (2015) and Ögenler et al. (2014)

Questions	Ogenler et al. (2014)	Erbay et al. (2015)	Current Study	
			Academicians/ Assistants	Students
Human is a valuable asset. For this reason, the human body must be valued and respected during life and after death.	9.87 \pm 0.56	4.27 \pm 1.04	4.84 \pm 0.58	4.68 \pm 0.75
The cadaver should be in a more respected position because of the training anatomy education contribution	8.06 \pm 2.97	3.60 \pm 1.12	4.75 \pm 0.66	4.41 \pm 0.85
On the right of privacy, covering the face of the cadaver during the dissection is a human delicacy that should not be neglected.	6.01 \pm 3.30	3.27 \pm 1.19	3.81 \pm 1.13	3.61 \pm 1.18

Discussion

Cadaver demonstrations in anatomy classes is one of the most important elements that distinguish anatomy courses from other courses or lessons; however, some inappropriate approaches, behaviours or jokes can be occasionally observed in those classes as undesirable conditions and a misstep for the medical education especially in terms of medical humanities. While the objectifying a dead body is important for understanding the anatomy courses, this instance is not an element or argument that will prevent us to respecting it. On the contrary, studying on a cadaver requires sensitivity and modesty (9). The dissection of the body or studying on dissected cadaver must have been carried out with a profound respect because of the right of the privacy involves the after death, too (10). In this respect, anatomists are given the responsibility to integrate medical ethics into traditional anatomy courses. The dissection has been essential and ideal technique not only for learning the anatomy three-dimensionally but also a step towards the humanistic approach. The main ethical concern of dissection of the body or studying on the dissected cadavers has been lying in the respect to human life besides to thinking of death and human mortality. These values that the students obtain during the anatomy classes will be a factor complementing their clinical training phase (11-13). Approaching to cadavers with exclusive respect and dignity during the training process can also enhance the body donations and public awareness (13).

It must be considered that some ethical dilemmas can be resolved through debates between different branches of science as well as among medical professionals, ethicists, lawyers, politicians and the public. The anatomists have also taken an important part in this interdisciplinary group on the issue of respecting the dead body and protecting the human privacy (14). If ethics and professionalism were essential to be a “good doctor”, the curriculum should be inward with the relevant and profound topics (15). In the study of Kara et al. 2012, the students stated that they regard the anatomists as examples at anatomy classes on the point of respecting the human body and they understand during their course of training with cadavers that they are persons and didn't lose their values of existence after death.

We are aware that there are some improper situations between popular media and medicine recent years, and it is increased by the access power of the media.

Some sensationalistic topics began to be seen as: “Medical students' cadaver photos get scrutiny after images show up online”, “Nursing students expelled from university after

posting pictures of themselves posing with a human placenta on Facebook”, “Fired for Facebook: ER personnel lost their jobs for online posts”, etc. An exponential increase in the use of social sharing platforms and practices is also associated with concerns about privacy and responsibility for healthcare professions (16,17). On this point, beside dissecting the body or treating the cadaver sensitively, respecting the privacy of the deceased has been essential at anatomy teaching (18). In the study of Ögenler et al. 2017, they obtained the thoughts of 201 students of Mersin University about privacy of cadavers. They scored the answers between 0 and 10 points. They obtained the results (means±SD) by asking the following questions given as examples; “Taking photos or videos of dead body in order to keep in memory (4.09±3.736)”, “The privacy of a dead body must be protected and people who are not interested should be prevented from seeing or having information about deceased (7.77±3.132)”, “The images (photo/video) taking part in mass media (television, internet sites, magazines etc.) is inconvenient (7.28±3.205)” (19). In our study we asked the question that “Sharing the photos / videos including cadaver images on social media is not ethical” and our results were 4.69±0.62 and 4.45±0.84; academicians/assistants and students, respectively.

In the study of Erbay et al. 2015, (scored 1-5) the authors obtained the results (means±SD) by asking the following questions given as examples; “Students should not be opposed to taking souvenir photographs with cadavers (2.42 ± 1.39), “Exhibiting of the dead human body in public areas for non-educational purposes, adversely affecting cadaver donation (3.79 ± 1.02). Similar question in our study was “Sharing cadaver photos / videos on social media negatively affects cadaver donation (academicians/assistants; 4.39±0.89 and students; 4.31 ± 0.68) (20). In the study of Ögenler et al. 2014, (Scored 1-10) they also asked a similar question: “It is an application that should not be disputed because students have to take a souvenir photo together with the cadaver (1.39±2.68) (21). Other similar questions and results in the studies of Ögenler et al. and Erbay et al. were given at Table 5. Hennessy et al. 2020 studied about social media use in Anatomy education. The 50 delegates joined to two-hours workshop. The attendees gave feedback about the usefulness of the different social media. Besides they declared that a growing concern for the ethical challenges in anatomy education because of sharing cadaver images on social media (22).

Conclusion

Anatomy has been a medical discipline of science that the students first meet the human body and in which they feel that they would become a doctor. In this sense of cadaver as a first patient model, they study on cadavers in anatomy classes. It must have been seen as a living being, rather than objectifying the cadaver because of its lifeless body. So, the students should acquire the first ethical values of human body and death related to patient privacy in the first

years of their education. In this context, the ethical concern and things to do about privacy of dead bodies should take part among the essential education strategies of anatomists. It is necessary to organize activities like panels, multimedia-based discussions etc. about approaching the cadavers dead body privacy and ethics in cooperation with medical ethics department, other relevant departments, boards or

References

1. Moore KL, Dalley A. Clinically Oriented Anatomy. Lippincott Williams & Wilkins 2 1999.
2. Gökmen GF. Sistematik Anatomi. İzmir Güven Kitabevi 1, 2003.
3. Sindel M, Şenol Y. Akdeniz Üniversitesi Tıp Fakültesinde Anatomi Eğitiminin Öğrenciler Tarafından Değerlendirilmesi. Tıp Eğitimi Dünyası 2008;28(28):31-36.
4. Ajita R, Singh YI. Body donation and its relevance in anatomy learning. J. Anat. Soc. India. 2007; 56:44-47.
5. Arraez-Aybar LA, Bueno-Lopez JL, Moxham BJ. Anatomists' views on human body dissection and donation: An international survey. Annals of Anatomy. 2014; 196:376-386.
6. Boulware LE, Ratner LE, Cooper LA, Laveist T, Powe NR. Whole Body Donation for Medical Science: A Population-Based Study. Clinical Anatomy. 2004; 17:570-77.
7. Şehirli Ü, Saka E, Sarıkaya Ö. Attitudes of Turkish Anatomists Toward Cadaver Donation. Clinical Anatomy. 2004; 17:677-681.
8. Rai R, Shereen R, Protas M, Greaney C, Brooks KN, Iwanaga J, et al. Social Media and Cadaveric Dissection: A Survey Study. Clinical Anatomy. 2019; 32:1033-1041.
9. Kara A, Ögenler O, Elvan Ö Anatomi Anıları. İnönü Üniversitesi Tıp Fakültesi Dergisi. 2012;19(1):54-6.
10. Morar S, Perju-Dumbrava D, Cristian A. Ethical and Legal Aspects of the Use of the Dead Human Body for Teaching and Scientific Purposes. Romanian Journal of Bioethics. 2008;6(4):75-83.
11. Shaikh ST. Cadaver Dissection in Anatomy: The Ethical Aspect, Anat Physiol. 2015;5(5):1-2.
12. Williams AD, Greenwald EE, Soricelli RL, DePeace DM. Medical Students' Reactions to Anatomic Dissection and the Phenomenon of Cadaver Naming. Anat Sci Educ. 2014; 7:169-180.
13. Zhang L, Wang Y, Xiao M, Han Q, Ding J. An Ethical Solution to the Challenges in Teaching Anatomy with Dissection in the Chinese Culture. Anat Sci Edu. 2008; 1:56-59.
14. Satyapal KS. Ethics, Transplantation, and the Changing Role of Anatomists. Clin. Anat. 2005; 18:150-153.
15. Saad TC, Riley, Hain RA. Medical curriculum in transition: audit and student perspective of undergraduate teaching of ethics and professionalism. J Med Ethics. 2017; 43:766-770.
16. Hade RAL, Brown ED. Patient Privacy and Social Media. AANA Journal. 2010;78(4):270-74.
17. White J, Kirwan P, Lai K, Walton J, Ross S. 'Have you seen what is on Facebook?' The use of social networking software by healthcare professions students. BMJ Open. 2013;3: e003013.
18. Jones DG. Anatomical Investigations and Their Ethical Dilemmas. Clin Anat. 2007; 20:338-343.
19. Ögenler O, Kadioğlu NS. Ölü İnsan Bedeni ile İlişkiler: Mersin Üniversitesi Sağlık Hizmetleri Meslek Yüksekokulu Öğrencilerinin Görüşleri. Türkiye Biyoetik Dergisi. 2017;(1):3-13.
20. Erbay H, Bilir A, Gönül Y, Turamanlar O, Songur A. Tıp fakültesi öğrencilerinin kadavra algısı ve eğitimde kadavra kullanımına yönelik yaklaşımları. Türkiye Biyoetik Dergisi. 2015;2(1):63-72.
21. Ögenler O, Kara A, Kadioğlu S, Öztürk AH, Sungur MA. Bir grup anatomi öğretim elemanının kadavra ve eğitimde kadvrakullanma hakkındaki görüşleri. Türkiye Biyoetik Dergisi. 2014;1(1):57-68.
22. Hennessy C, Brown K, Mike P, Keenan I, Holland J, Mayer A, et al. 21st Century Anatomists: Social Media Use in Anatomy Education and Research. International Federation of Associations of Anatomists 19th Congress 2020, Abstract Book, 363.