# The views of Usak University Dental Faculty academic staff on anatomy education

### Mahmut Cay, Sinan Bakirci

Usak University Faculty of Medicine, Department of Anatomy, Usak, Turkey

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#### Abstract

**Aim:** In this study, we aimed to find out the positive and negative effects of the pregraduation anatomy education received by academic staff working in the Faculty of Dentistry on their professions both as an educator and as a dentist.

Material and Methods: The study was conducted through a questionnaire given to 19 academic staff at Uşak University Faculty of Dentistry. A 5-Likert type scale was used for the reliability of feedback.

**Results:** Of the academic staff who participated in the study, 3 were research assistants, 13 were assistant professors, 1 was associate professor and 2 were professors. 84% of the academic staff who participated in the study stated that they "liked the anatomy course during their undergraduate education" and 95% stated that "the content of anatomy course was useful in professional sense". 90% of the participants stated that "there should be an anatomy department in dentistry faculties".

**Conclusion:** We believe that these feedbacks we get from the academic staff participants will contribute to anatomy education given during undergraduate period in dentistry education.

Keywords: Anatomy Education; Dentistry; Feedback; Anatomy.

## **INTRODUCTION**

Dentistry education was within general medicine education until a few centuries ago. Later, dentistry education, which is a specific medical unit, formed its departments and became an independent faculty. When the general curriculum of dentistry faculties is reviewed, it can be seen that the education about basic medical sciences is given to students in the first years. One of the intensive courses given within the basic medical sciences is human anatomy course (1,2).

Human anatomy, which is the oldest known medical science, is defined as one of the most important courses of dentistry education (3). In general, anatomy is expressed as a science which examines the shapes, structures, positions, neighborhood and associations of organs with each other. Anatomy education is given to students of faculty of medicine, faculty of dentistry and health sciences in the first years of their education and forms the basis of medical terminology and clinical sciences (4,5).

Anatomy education given in dentistry faculties is most of the time in parallel with the curriculum of medical faculties and it is taught in two different parts as theoretical and practical education. Practical anatomy courses in which the three dimensional structure of human body is introduced through cadavers, models, human anatomy atlas and computer programs for anatomy education are at least as important as theoretical anatomy courses (6-8).

There are various assessments and feedbacks in studies conducted about the anatomy education given in the faculty of dentistry. These feedbacks provide positive changes in anatomy education with developing and changing technology. This change requires academic staff giving anatomy education to be more equipped and to prepare a course content that will appeal more to students of the faculty of dentistry (1,2).

Students who are graduated from the faculty of dentistry work not only as dentists but also as academic staff in faculties of dentistry. There are studies in literaturewhich have tried to describe the feedback about anatomy education by students of faculties of dentistry and medicine and academic staff of the faculty of medicine (2,8,9). At the same time, there are studies conducted to

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**Corresponding Author:** Mahmut Cay, Usak University Faculty of Medicine, Department of Anatomy, Usak, Turkey **E-mail:** mcay.anatomi@gmail.com

compare the anatomy education given in our country with the anatomy education given abroad (1). However, there is no feedback about how important the anatomy education received by academic staff in the faculty of dentistry is and the level of this importance.

In this study, our purpose was to find out the positive and negative effects of the pre-graduation anatomy education received by academic staff working in the Faculty of Dentistry on their professions both as an educator and as a dentist.

## **MATERIAL and METHODS**

#### Universe and Sample of the Study

The study included 19 academic staff working in the faculty of dentistry in Uşak University. The sample was not chosen and the answers of the academic staff who filled in the survey were accepted as the data of our study.

### **Data Collection Tools**

After voluntary consent forms were signed by academic staff, a data collection tool was used. As a result of the literature review conducted about the categories to be assessed in the questionnaire, the participants were asked questions about the assessment of theoretical and practical anatomy knowledge courses given in undergraduate period and the professional contributions and goals of these courses (2, 8). There were also questions about the ages and genders of the academic staff, universities in which they completed their undergraduate education, the departments they worked in and their titles. The names of the academic staff were not included in the survey in terms of the reliability of feedback. 5-Likert type scale was used in grading and the following expressions were used.

- Totally disagree
- Disagree
- Undecided
- Agree
- Totally agree

In the analyses, in order to make the results clearer, the answers "totally disagree" and "disagree" were assessed as "disagree", while the answer "undecided" was assessed as "undecided" and the answers "agree" and "totally agree" were assessed as "agree".

This study was approved by the 2018/81-03 numbered decision of Uşak University Faculty of Medicine

Noninvasive Researches Ethical Board. Permission was taken from the Dean of Uşak University, Faculty of Dentistry before the questionnaires were applied. After the purpose of the study was explained to the academic staff, informed consent form and questionnaire were given to the academic staff who volunteered to participate in the study and they were told that they did not need to write their names on the questionnaires.

## RESULTS

Of the 19 academic staff in the research group, 63% were females and 37% were males and their average age was 34.25±3.87. All of the academic staff was citizens of the Republic of Turkey. Of the academic staff who participated in our study. 3 were research assistants. 13 were assistant professors, 1 was associate professor, and 2 were professors. The university's academic staff graduated from were different and 12 different university names were given. Of the academic staff who participated in the study, 84% stated that they "liked the anatomy course during their undergraduate education" while 16% stated that they were undecided. While 69% of the academic staff thought that"the number and duration of theoretical anatomy courses they received during their undergraduate education were sufficient", 10% were undecided and 21% thought they were insufficient. The answers to the expression "the number and duration of practical anatomy courses they received during their undergraduate education were sufficient", were "agree" by 74%, "undecided" by 5% and "disagree" by 21% (Table 1).

95% of the academic staff stated that "the content of anatomy course was useful in professional sense", and 5% answered as undecided. 90% of the participants answered the expression "there should be an anatomy department in dentistry faculties" as "agree", while 10% answered as "disagree". While 89% answered the expression "systematic anatomy course contributed to me professionally" as "agree", 11% answered as "disagree". While 95% answered the expression "Topographic anatomy course contributed to me professionally" as "agree", 5% answered as "disagree" (Table 2).

While 100% of the academic staff thought that "a crash anatomy repeat course in the fourth and fifth years would be useful", 95% answered the expression "Clinical anatomy course would be useful in specialization in dentistry" as "agree" (Table 3).

Table 1. Sufficiency of theoretical and practical courses						
	Disagree	Undecided	Agree			
Liked the anatomy course during their undergraduate education	-	16%	84%			
The number and duration of theoretical anatomy courses during were sufficient	21%	10%	69%			
The number and duration of theoretical anatomy courses was longer	89%	5%	5%			
The number and duration of practical anatomy courses during were sufficient	21%	5%	74%			
The number and duration of practical anatomy courses was longer	84%	10%	6%			
Cadaver should be used in practical anatomy courses.	5%	5%	90%			
The number of models used in practical courses was sufficient.	21%	21%	58%			
I learned Latin terms in the anatomy class and it was easy for me to understand the other lessons	-	20%	80%			

	Disagree	Undecided	Agree
The content of anatomy course was useful in professional sense	-	5%	95%
There should be an anatomy department in dentistry faculties	10%	-	90%
Systematic anatomy course contributed to me professionally	11%	-	89%
Topographic anatomy course contributed to me professionally	5%	-	95%
Head and neck region anatomy course contributed to me professionally	-	-	100%
Thorax anatomy course contributed to me professionally	21%	37%	42%
Abdomen anatomy course contributed to me professionally	26%	42%	32%
Upper extremity anatomy course contributed to me professionally	11%	32%	58%
Lower extremity anatomy course contributed to me professionally	37%	37%	26%
Digestive system anatomy course contributed to me professionally	16%	31%	53%
Respiratory and circulatory system anatomy course contributed to me professionally	10%	16%	74%
Urogenital system anatomy course contributed to me professionally	32%	37%	31%
Nervous system anatomy course contributed to me professionally	5%	5%	90%
Anatomy courses were described in relation to my profession.	5%	52%	43%
think that the anatomy course is a waste of time in terms of my education.	84%	11%	5%

	Disagree	Undecided	Agree
Anatomy compensation course in the fourth and fifth years would be useful.	-	-	100%
Clinical anatomy course would be useful in specialization in dentistry	-	5%	95%

## DISCUSSION

Anatomy has an important place in basic dentistry education. In addition to being a way to assess the quality and defects of the education applied, feedbacks of academic staff and students through questionnaire also have high reliability and validity (10). Feedbacks of dentists who are also working as academic staff about anatomy education are very important. Quality and satisfaction in university education occur and increase through meeting the conditions of learning students need and providing the materials which are required for these conditions (11).

Dentists who graduate with a high quality anatomy education will get better results in physical examination and diagnosis. For this reason, a good anatomy education is needed to educate qualified dentists and also for correct diagnosis and correct surgical interventions (4). The results of this study also support these views and 95% of the participants stated that the content of anatomy course contributed to them professionally. 90% of the participants stated that there should be a department of anatomy in the faculties of dentistry.

The fact that the participants in our study graduated from different universities provide us advantage in terms of assessing the feedback. 84% of the participants stated that they liked the anatomy education. In addition, while 69% of the participants thought that the number of theoretical anatomy courses was sufficient during the undergraduate education, 74% thought that the number of practical anatomy courses was sufficient.

In this study, in line with the answers given by academic staff, it was found that systematic anatomy (89%)

and topographic anatomy (95%) courses given in undergraduate education were professionally useful for dentists. In terms of the course content, the subjects participants made the most use of were found as headneck area anatomy (100%), neuroanatomy (90%) and respiratory-circulatory system anatomy (74%). In other subjects, the number of participants who were undecided or those who did not agree was higher.

In terms of the feedbacks related with expectations in anatomy education, the academic staff stated that anatomy education should not be given only as a basics course and there should be a crash anatomy repeat course in the fourth and fifth years (100%) and that clinic anatomy course would be useful during specialization in dentistry (95%).

In literature review about the research subject, since we could not find a study similar to the survey we conducted with the academic staff of the faculty of dentistry, we could not perform a healthy comparison of our study. Studies found in literature were generally conducted with the students in the faculties of dentistry and medicine and with the academic staff in the faculty of medicine (2,8,9).

## CONCLUSION

We believe that the present study will be a resource in terms of literature. In addition, we think that these feedbacks we get from the participants who are working as academic staff will make a contribution to anatomy education given in undergraduate dentistry education.

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Mahmut Cay ORCID: 0000-0002-7757-055X Sinan Bakirci ORCID: 0000-0003-1170-6036

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