International Journal of
Health Systems and Medical Science

ISSN: 2833-7433
Volume 1 | No 6 | Dec-2022

Methods of Teaching Anatomy at the University of Pavia

Shuhrat Teshaev [1], Dilnoza Khasanova [2]

[1, 2] Department of Anatomy, clinical anatomy (OSTA), Bukhara State medical institute named after Abu Ali ibn Sino, A. Navoi №1 street, 200118, Bukhara, Uzbekistan

Abstract: Teach and control knowledge of human anatomy should be used as modern technology: controlled independent work, test control of knowledge, and traditional methodological techniques in the form of oral questioning, interviews, seminars and oral exams.

Keywords: educational process, innovative technologies, department of anatomy, university of Pavia.

The modern educational process is unthinkable without the search for new, more effective technologies designed to promote the development of creative abilities of students [1,8,12,18]. Anatomy is considered to be the most important discipline in any medical and biological University. Without knowledge of the structure of the human body is impossible to study any clinical discipline.

But anatomy is also one of the most difficult subjects for all medical students. That is why high-quality teaching of this course is crucial for the release of worthy professionals. At the present stage, the training of competent specialists in any field of medicine involves the use of innovative technologies. At the same time, the historical experience of teaching anatomy shows that in the organization of the educational process the most optimal is the combination of traditional approaches with modern, innovative teaching methods [4,9,14,17]. Traditional training is mostly of a reproductive character. The work of the teacher is focused on the transfer of knowledge to the student in the finished form, followed by the control of knowledge by reproduction and assimilation of them. An innovative approach to the educational. process, in which the purpose of training is to develop students' opportunities to learn new experiences on the basis of purposeful formation of creative thinking, role and simulation.

The aim of the study was to analyze the experience of the teaching staff of the Department of anatomy at the university of Pavia. In the academic year 2022/23, the students enrolled in the Golgi Medical course of university of Pavia wiil be approxsmately 330. In addition to lectures, always involves students in practical activities to induce them to transform the concepts learned on the books into three- dimensional structures that can be finally lead back to the patient's body. To achieve this purpose, we have created a route divided into stages. The first phase takes place in the anatomical room. With the help of the book. The student must recognize the structures indicated in a pre-printed sheet on the 3D plastic model. The second phase involves recognition of the same structures on a human prosection. Fortunately, we have many samples available for this, they belong to the collection started in Pavia by Antonio Scarpa and implemented by successors as Bartolomeo Panizza (1785-1867) and Giovannni Zoja (1833-1899) [22,27,30,24]. In the third stage students, under the guidance of a tutor, experience the use of Anatomage to simulate anatomical dissection but using digitized dissection. Students are asked to reproduce the previously examined prosection and, where possible, implement it with further anatomical details. The phase involves analyzing radiological anatomy images using the specific functionality offered by Anatomage Table, choosing them from those present in the database is analysed. The case must have characteristics such as to involve a morphologically significant alteration of the same anatomical structures. Last stage, the

tutorial ends with viewing a short cadaver dissection video. While viewing the recording, than ask the student to recognize the main visible structures.

Unfotunately, in our University the dissection from a cadaver is not feasible but, in combination with the use of 3D models and prosections.

The peculiarity of anatomy as a discipline is the relative immutability of its content. Therefore, to make the lecture more informative and attractive for students, the lecturer has to use the data of related theoretical sciences, as well as to look for new original forms of presentation of educational material. As you know, the form of presentation of lectures are divided into traditional and active [3,10,13,16]. Most of the lectures offered at the Department of Anatomy and clinical anatomy are traditionally given, but almost every of them contains elements of active lecture forms: problem lecture, visualization lecture, dialogue lecture. In our opinion, one of the forms of lectures, which harmoniously combines all influencing the person streams of information (sensory, verbal), it is possible to consider the lecture - visualization, and, above all, readable with the use of multimedia tools. [19,25,33,30]. The development of such lectures imposes a number of requirements on the lecturer: careful selection of lecture material, its compliance with the discipline program, clarity of wording and definitions, consistency and consistency of presentation, high quality of illustrative material, high informative text and illustrative parts.

The undoubted advantages of lectures using multimedia are: maintaining the constant attention of students through the use of a variety of visual effects; the ability of students to perceive a significant amount of material without fatigue observed by the end of the traditional lecture; achieving the unification of teaching due to the fact that the developed materials can be easily used by other lecturers of the Department. In our opinion, the course of lectures on human anatomy should include all types of lectures, as each of them solves certain problems, which allows for optimal assimilation of individual topics of the subject and the content of the discipline as a whole. Controlled independent work, i.e. planned educational and scientific work of students, carried out under the guidance of the teacher, but without his direct participation, allows students to develop the need to acquire knowledge, forms the creative activity of the individual [5,7,11]. Test control of students' knowledge is an important part of our work. Employees of the Department created tests in all sections of human anatomy, designed to assess the level of knowledge in the interim control of knowledge of students of all faculties, which meet the requirements for the test tasks (validity, reliability, representativeness and standardization) [2,6,15]. Materials of test tasks include the most important, basic knowledge and fully correspond to the content of the curriculum. The experience of computer testing as one of the methods of control of students' knowledge is positively perceived by teachers of the Department and students of 1 and 2 courses, who easily cope with the technical side of the test and are satisfied with the content and correctness of the test tasks. In some cases, however, there was a discrepancy between the test scores and the teacher's grade [20,23,26, 28, 31]. Apparently, one of the reasons for this discrepancy was that the test control reveals only theoretical knowledge of anatomy. For a more objective assessment of students' knowledge of anatomy, should be combined with testing of practical skills, for example, the ability to position the body relative to itself, showing its structural elements, to demonstrate on dummy vessels, nerves, etc. Thus, in our opinion, to teach and control knowledge of human anatomy should be used as modern technology: controlled independent work, test control of knowledge, and traditional methodological techniques in the form of oral questioning, interviews, seminars and oral exams.

Literature:

1. Ahrorovna, K. D., & Jumaevich, T. S. (2018). Topografic-anatomical features of lymphoid structures of the small intestine of rats in norm and against the backround of chronic radiation diseases. *European science review*, (9-10-2).
2. Akhrorovna, K. D. Medical Field Morphological Features of Human and Mammalian Spleen in Postnatal Ontogeny. JournalNX, 7(1), 252-256.

3. Ahrorovna, K. D. (2021). Age-related morphofunctional features of changes in the thymus gland of experimental animals under the influence of genetically modified product. *Middle European Scientific Bulletin*, *11*.
4. Ahrorovna, K. D. (2020). Effect of a genetically modified product on the morphological parameters of the rat's spleen and thymus. *European Journal of Molecular and Clinical Medicine*, *7*(1), 3364-3370.
5. Ahrorovna, K. D., & Rustamovna, U. R. (2021, August). GENMODIFIZIERTE PRODUKTE SEIN EINFLUSS AUF DIE MORPHOLOGIE von MILZ UND THYMUSDRÜSE BEI VERSUCHTIEREN. In *INTERNATIONAL CONFERENCE ON MULTIDISCIPLINARY RESEARCH AND INNOVATIVE TECHNOLOGIES* (Vol. 1, pp. 10-13).
6. Ahrorovna, K. D., & Dilshodovich, K. M. (2021). MORPHOGENESIS OF THE THYMUS OF LABORATORY ANIMALS UNDER THE INFLUENCE OF VARIOUS FACTORS. *Web of Scientist: International Scientific Research Journal*, *2*(04), 483-488.
7. Burgin M. S. Innovation and novelty in pedagogy. - Novosibirsk: 2009. - P. 25-30.
8. Denisov S. D. (et al.) Development of tests to control students' knowledge: educational and methodical benefit - Minsk: Belarusian state medical University, 2008. – 43 p.
9. Karandashev V. N. Methods of teaching psychology: educational benefit /V. N. Karandashev. - SPb.: Peter, 2005. - 250 p.
10. Khasanova, D. A., & Teshaev, S. J. (2018). Topografic-anatomical features of lymphoid structures of the small intestine of rats in norm and against the backround of chronic radiation diseases. *European science review*, (9-10-2), 197-198.
11. Khasanova, D. (2020). Wirkung eines gen-modifizierten produkts auf die morphologischen parameter der strukturen der milz Weißer ratten. *InterConf*.
12. Khasanova, D. A. (2021). MORPHOFUNCTIONAL CHANGES IN THYMUS GLAND OF RATS EFFECTED BY GENETICALLY ENGINEERED CROPS. In *ADVANCED RESEARCH: PROBLEMS AND NEW APPROACHES* (pp. 120-125).
13. Khasanova, D. A. (2021). MICROSCOPIC STRUCTURE OF THE RAT SPLEEN DURING THE INTRODUCTION OF A GENETICALLY MODIFIED PRODUCT. *British Medical Journal*, *1*(1.2).
14. Khasanova, D. A. (2021). HISTOLOGICAL STRUCTURE OF THE RAT SPLEEN IN EARLY POSTNATAL ONTOGENESIS. *Art of Medicine. International Medical Scientific Journal*, *1*(2).
15. Akhrorovna, K. D. (2021). ANATOMICAL CHARACTERISTICS OF THE RAT SPLEEN DURING THE INTRODUCTION OF A NON-GENETICALLY MODIFIED PRODUCT. *Conferencea*, 7-8.
16. Akhrorovna, K. D. (2021). MACROANATOMIC CHARACTERISTICS OF THE THYMUS GLAND IN RATS IN EARLY POSTNATAL ONTOGENESIS. *Conferencea*, 22-23.
17. Sugand K., Abrahams P.,Khurana A. The anatomy of anatomy: a review for its modernization / K. Sugand // Anat Sci Educ.- 2010. - 3. P. 83-89.
18. Zolotukhina L. S. Organization of independent work of students /L. S. - 2003. - № 12. - P. 11-14
19. Мухидова, Г. Х. (2021). Феномен «компьютерной зависимости: особенности интернетзависимости у подростков». Eurasian journal of medical and natural sciences, 22-26.
20. Мухидова Г.Х. "Zamonaviy ta`lim: muammo va yechimlari". Особенности антропометрических параметров компьютерно-зависимых подростков мальчиков. 2021г стр 49-50.
21. Мухидова Г.Х. "Zamonaviy ta`lim: muammo va yechimlari".Морфофизиологические особенности и степеньинтернет-зависимости у подростков. 2021г стр 45-46.

22. Mukhidova, G. X., &Sanoev, B. A. (2022). Causes and Occurrence of Uterine Endometrial Polyps in Women in Bukhara Region. International Journal of Discoveries and Innovations in Applied Sciences, 2(3), 42-45.
23. Muxidova Gulmira Xasanovna MORPHOMETRIC AND MORPHOLOGICAL FEATURES OF THE PLACENTA IN NORMAL PREGNANCY. Web of science 3, page 365-373
24. Mukhidova Gulmira Xasanovna FEATURES OF COMPUTER-ADDICTIVE AND COMPUTER-NONADDICTIVE ADOLESCENTS ON ANTHROPOMETRIC INDICATORS. Web of science 3, page 358-364
25. Ilxomovich, N. A. (2022). CLINICAL AND EPIDEMIOLOGICAL FEATURES OF COVID-19 DISEASE IN CHILDREN. BARQARORLIK VA YETAKCHI TADQIQOTLAR ONLAYN ILMIY JURNALI, 2(9), 182-186.
26. Назаров, А. И. (2022). АУТИЗМ КАСАЛЛИКИНИ ЭРТА АНИҚЛАШДА ВА ДАВОЛАШДА ДАВО ЧОРАЛАРИНИ ИШЛАБ ЧИҚАРИШ ВА ДАВО САМАРАДОРЛИГИНИ ОШИРИШ. Scientific progress, 3(1), 1143-1152.
27. Nazarov, A. (2021). CHALLENGES TO UZBEKISTAN'S SECURE AND STABLE POLITICAL DEVELOPMENT IN THE CONTEXT OF GLOBALIZATION. Journal on International Social Science, 1(1), 26-31.
28. Назаров, А. И. (2022). COVID-19 БИЛАН КАСАЛЛАНГАН БЕМОРЛАРНИНГ БОЛАЛАРНИНГ КЛИНИК ВА ЭПИДЕМИОЛОГИК ХУСУСИЯТЛАРИ. Scientific progress, 3(2), 1026-1031
29. Nazarova, F. I. (2022). SOG'LOM FARZAND OILA QUVONCHI. Scientific progress, 3(2), 1010-1015.
30. lhomovna, N. F. (2022). DORIVOR O'SIMLIKLARNING O'ZBEKISTONDAGI AHAMIYATI. BARQARORLIK VA YETAKCHI TADQIQOTLAR ONLAYN ILMIY JURNALI, 507-512.
31. Ilhomovna, F. N. (2022). LATE SEIZURES AND CONSEQUENCES OF EPILEPSY IN YOUNG CHILDREN. *Conferencea*, 219-223.
32. Ilhomovna, F. N. (2022). RESPONSIBILITY OF PARENTS BEFORE THE OFFSPRING. *Conferencea*, 441-446.
33. Nazarova, F. (2022). Qaridoshlar orasidagi ofat. Scientific progress, 3(1), 663-669.