TOSHKENT TIBBIYOT AKADEMIYASI
«O'QUV VA ILMIY TIBBIYOT JURNALI»

TASHKENT MEDICAL ACADEMY
«JOURNAL OF EDUCATIONAL AND SCIENTIFIC MEDICINE»

IXTISOSLASHUVI: «TIBBIYOT SOHASI»

(ISSN 2181-3175)
Berilgan sanasi: 31-01-2022

Mazkur hujjat Vazirlar Mahkamasining 2017 yil i5 sentabrdagi 728-son qarori bilan tasdiqlangan O'zbekiston Respublikasi Yagona interaktiv davlat xizmatlari portali to'g'risidagi nizomga muvofiq shakllantirilgan elektron hujjatning nusxasi hisoblanadi.

№ 1 (05), 2022 (Том 1)

Публикации в журнале учитываются как опубликованные работы при защите диссертаций на соискание ученых степеней Узбекистана и зарубежья.

К публикации принимаются статьи, ранее нигде не опубликованные и не представленные к печати в других изданиях. Статьи, поступившие в редакцию, рецензируются. За достоверность сведений, изложенных в статьях, ответственность несут авторы публикаций. При использовании материалов ссылка на журнал и авторов статей обязательна.

Материалы публикуются в авторской редакции.

Tahririyat manzili:
Tashkent Medical Academy 100109, Tashkent, Uzbekistan
Farabi street 2 Helpline: +99878-150-7825:
Fax: +998 78 1507828 Email:info@tma.uz

OPTIMIZATION OF THE EDUCATIONAL PROCESS AT THE DEPARTMENT OF GENERAL SURGERY

Okhunov A.O., Khudaibergenova N.Sh., Kasimov U.K., Atakov S.S., Bobabekov A.R., Boboev K., Abdurakhmanov F.M.
Tashkent Medical Academy

Summary*: this article outlines the improvement of the regulatory and legal framework in the field of training medical personnel with the implementation of methodological guidance of medical educational institutions, as well as the system of postgraduate education, advanced training and retraining of specialists for the healthcare system today is a priority task of reforming the medical education system in the Republic Uzbekistan. The entire educational process consists of various educational blocks and is based on the principle of "single day of surgery". The work begins with a lecture on the topic being covered and continues in two main directions - theoretical and practical in a 50/50 ratio. At the same time, an important attribute of this approach is the continuation of the educational process into work practice, which is based on the application of the traditional principle of ‘‘learning at the bedside of the patient’’.*

The proposed recommendations can be used in the organization of the educational process in the system of medical education, including in the system of advanced training and professional retraining.

Xulosa*: ushbu maqolada tibbiyot ta’lim muassasalariga uslubiy rahbarlikni amalga oshirish orqali tibbiyot kadrlarini tayyorlash sohasidagi me’yoriy-huquqiy bazani, shuningdek, oliy o‘quv yurtidan keyingi ta’lim, sog‘liqni saqlash tizimi uchun kadrlar malakasini oshirish va qayta tayyorlash tizimini takomillashtirish belgilangan. O‘zbekiston Respublikasida tibbiyot ta’limi tizimini isloh qilish bugungi kunning ustuvor vazifasidir. Butun o'quv jarayoni turli xil o'quv bloklaridan iborat bo'lib, "bir kunlik jarrohlik amaliyoti" tamoyiliga asoslanadi. Ish o'tilgan mavzu bo'yicha ma'ruza bilan boshlanadi va ikkita asosiy yo'nalishda - nazariy va amaliy 50/50 nisbatda davom etadi. Shu bilan birga, ushbu yondashuvning muhim atributi an'anaviy "bemorning yotoqxonasida o'rganish" tamoyilini qo'llashga asoslangan o'quv jarayonini ish amaliyotida davom ettirishdir.*

Резюме*: В данной статье изложены совершенствования нормативно - правовых баз в сфере подготовки медицинских кадров с осуществлением методического руководства медицинскими образовательными учреждениями, а также системой послевузовского образования, повышения квалификации и переподготовки специалистов для системы здравоохранения на сегодняшний день является приоритетной задачей реформирования системы медицинского образования в Республике Узбекистан. Весь учебный процесс складывается из различных образовательных блоков и основан на принципе «единого дня хирургии». Работа начинается с чтения лекции по проходимой теме и продолжается в двух основных направлениях – теоретическом и практическом в соотношении 50/50. При этом важным атрибутом такого подхода является продолжение учебного процесса в производственную практику, которая основана на применении традиционного принципа «обучению у постели у больного».Предлагаемые рекомендации могут использоваться при организации учебного процесса в системе медицинского образования, в том числе и в системе повышения квалификации и профессиональной переподготовки.*

Improving the legal framework in the field of training medical personnel with the implementation of methodological guidance for medical educational institutions, as well as the system of postgraduate education, advanced training and retraining of specialists for the healthcare system is today a priority task of reforming the medical education system in the Republic of Uzbekistan.

The Decree of the President of the Republic of Uzbekistan No. 2956 dated May 5, 2017 “On measures to further reform the medical education system in the Republic of Uzbekistan” defines the main directions for improving the system of training medical personnel. Among them:

- Development and enforcement of state educational standards and requirements for higher and secondary special, professional medical education, advanced training;

- Retraining of healthcare professionals, as well as training of scientific and pedagogical medical personnel of the highest qualification;

- Implementation of a set of measures aimed at improving the level of theoretical and practical training of students of medical educational institutions by expanding training sessions in specialized and specialized subjects, clinical training practice during the study period;

- Wide involvement of faculty, bachelor's and master's students, clinical residents in research work in modern areas of medical development.

The Decree also determined the increase in the share of teaching hours in preclinical and clinical blocks of undergraduate education to 85%, including for clinical teaching practice, by reducing teaching hours in the humanitarian and socio-economic blocks to 7% of the total teaching time. Thanks to this decision, the responsibility to the clinical profile areas has significantly increased, the need for their radical revision of both theoretical and practical aspects of educational standards.

Implementation of the Decree of the President of the Republic of Uzbekistan At present, a specific system for training surgical specialists at the undergraduate level has been formed at the Tashkent Medical Academy, which is based to varying degrees on certain stages of training.

It is known that surgery is one of the most multifaceted and complex branches of medical knowledge, which is strictly structured according to the areas of influence of the doctor. All areas of surgery require high concentration, firmness of hands and a mass of knowledge, skills that should already be inculcated from the first days of study at a medical school.

Conducted by the staff of the First Moscow State Medical University. I. M. Sechenov, the analysis of the literature showed that there are few publications devoted to such aspects as teaching students surgical skills [4]. An example is given that in the publication of M. Patel et al. [14] describes in detail the work of the "Surgical Saturday", during which students learn non-invasive surgical skills (knotting, behavior in the operating room, getting to know the instruments, etc.). S. Ullah et al. [16] in their study present the work of the student club at the meetings of which practicing surgeons performed demonstrative operations for students on cadavers. As an example of the development of interest in the choice of a surgical specialty among students, a number of other authors [12] cite the work of a student circle organized by the Surgical Society of the University of Cape Town. R. Denadai et al. [7] describe the methodology for teaching young students by senior students and practicing surgeons the elementary techniques of operative surgery. In the work of K. Hamaoui et al. [9] from the UK emphasizes that the introduction of the issues of teaching students basic surgical skills into the curriculum contributed to the choice of many of them in surgical specialties.

In all medical universities of our Republic, graduating specialists with a diploma in general medicine, a unified system of training in surgery has been adopted.

With the beginning of the 2017/2018 academic year, already in the 1st year, a new subject "Keeping to the clinic" is taught. The subject consists of 4 blocks: "Introduction to the surgical clinic", "Introduction to the therapeutic clinic", "Introduction to pediatrics" and "Introduction to the pediatric surgery clinic". Students in the first year should learn how to communicate with patients, get acquainted with the general principles of work, with the very atmosphere of a surgical hospital.

In the third year, in semesters 5-6, students study "general surgery". In this course, they get acquainted with surgical infection, measures for its prevention and control, the principles of examination of surgical patients, diagnostic and treatment of injuries, bleeding,

various wounds, study the basics of traumatology, anesthesiology, oncology.

In the fourth year, in semesters 7-8, faculty surgery is taught. The course of faculty surgery includes the study of classical symptoms, methods of diagnosis and treatment of all major surgical diseases.

In the fifth year, in semesters 9-10, hospital surgery becomes the subject of study. Here, in addition to the classical principles of diagnosis and treatment of diseases, students learn a number of features in tactics, the most modern diagnostic and therapeutic techniques, get acquainted with a rare pathology.

It should be noted that in addition to surgery itself in the learning process, students study the sciences that are its branches. These are operative surgery, urology, otorhinolaryngology, ophthalmology, oncology, neurosurgery, traumatology, pediatric surgery, military field surgery.

In the last, sixth year of a medical higher education institution, students improve their knowledge in the main medical specialties, including surgery, in more real conditions, namely, in outpatient clinics, rural medical centers and central district hospitals.

The entire educational process consists of various educational blocks and is based on the principle **of "single day of surgery"**. The work begins with a lecture on the topic being covered and continues in two main directions - theoretical and practical in a 50/50 ratio. At the same time, an important attribute of this approach is the continuation of the educational process into work practice, which is based on the application of the traditional principle of **"learning at the bedside of the patient"**.

The educational process is organized on the basis of a single methodological system, where the goals and objectives of each lesson are specified, chronological maps of the lesson and the approximate main actions of the teacher and students are compiled. The main task, which is emphasized, is the final effectiveness of the lesson - what exactly students should be able to do at the end of a separate lesson. This task is achieved not only by the classroom educational process, but also by paying special attention to the independent work of students both in the clinic and outside of it.

An important role in the learning process is played by the ethical aspects of the relationship between the teacher and the student. A neat appearance, the sequence of presentation of the material, tact and correctness during communication with the patient, joint "training" work in the dressing room, operating room increase the effectiveness of training.

The theoretical part of the lesson includes the use of special electronic teaching aids with photographs and video materials of the operations of the studied nosology, independent work of students with the literature of the virtual library of the department, at the bedside, analysis of clinical cases in a training room, mastering skills using the “on each other” method and on phantoms, situations are created that bring the student closer to a practical clinical situation, an imitation of participation in the diagnostic and treatment process is created.

The teacher takes the leading role in the active participation of students in the clinic, their constant communication with patients and medical staff. It is he who is responsible for familiarizing students with the deontological principles of behavior in the clinic, which helps to avoid unpleasant situations. We believe that only under the strict supervision of a teacher is it possible for a student to participate in the dressing of a patient or as a second assistant in operations.

When working in a dressing room, classical methods of teaching practical skills are used, however, the pedagogical process in an operating room has its own characteristics. So, during the performance of endovideoscopic surgical interventions, when, thanks to the monitor, it is possible to adequately visualize the course of the operation, explanatory communication with students is carried out throughout the entire operation.

Test tasks play an important role in determining the level of knowledge of a student. At the same time, for surgical disciplines, we recommend using multimedia tests enriched with illustrative material, which allow you to remember many aspects of the material covered. Testing can be carried out at the begin-

ning of the lesson, in order to determine the starting level of mastering the educational material, and at the end of the lesson, in order to determine its final level.

A particularly important requirement is the ability to apply the acquired educational information in practical activities. Therefore, we devote enough time to a “live” conversation and a survey. Thus, an objective assessment of knowledge is carried out by means of test tasks and the determination of the student's ability to evaluate the clinical manifestations of surgical diseases, choose therapeutic tactics and technical aspects of surgical intervention at each lesson.

As mentioned above, in addition to classes throughout the year, starting from the first year, students undergo various types of industrial practice. At the same time, in the senior years, industrial practice is carried out in the conditions of rural medical centers and district hospitals both in the main place of residence of the student and in the rural district settlements adjacent to the university.

Student scientific circles at the departments of the surgical profile are the first and no less important stage in the formation of a future specialist. Within the framework of student circles, master classes are conducted by leading surgical specialists in order to teach students various practical skills. The results of this stage of preparing students for work in surgical specialties are often one of the main criteria for their selection for the postgraduate level of surgical training.

One of the important stages in the preparation of a future surgical specialist is the development of practical skills on various simulators and simulators, which can be made both by the hands of teachers and students, and acquired by medical universities from catalogs. The range of techniques that can be mastered on such simulators varies from knitting knots to performing complex cardiovascular, endosurgical, gynecological, urological, traumatological and other operations on interactive simulators.

Unfortunately, not all practical skills required for operations on various organs can be worked out on anatomical or interactive simulators. In addition, most branded simulators are expensive and, at the same time, not always capable of simulating real situations. For these purposes, it is necessary to use the development of practical skills on experimental animals.

Work on animals in an experimental student operating room is the next stage in the training of a surgeon. It is possible to perform an operation on laboratory animals (rats, rabbits, pigs) only after mastering a high degree of surgical skills, which is very important not only from a methodological, but also from an ethical point of view. According to Dydykin S.S. et al., no more than 10–15% of students who have started classes in the circle reach this level of mastering manual skills [4].

Working in an experimental operating room allows students to really assess their abilities, more purposefully begin an in-depth study of their chosen field of activity, which helps to improve their training as future surgical specialists.

Participation in the student surgical Olympiad is a serious incentive for the training of future surgical specialists. There is no doubt that the preparation and participation in the Olympiad is one of the main tools to stimulate the interest of a student who has chosen a surgical specialty to master practical skills.

Thus, the training of surgical specialists at the Tashkent Medical Academy begins among first-year students, which allows by the time of graduation to prepare general practitioners who are highly proficient in a wide range of practical skills. At the same time, the use of the entire complex of student training described above (multimedia tests, electronic resources, simulators, simulators, etc.) in practical training of students increases the efficiency of mastering practical skills. The participation of students in circles and in Olympiads in the profile direction is a catalyst for mastering practical skills, as it stimulates the learning process in a competitive form.

LITERATURE

1. Akopov A. L., Massard J., Artyukh D. Yu. hir. 2015. No. 4. pp. 87–92

2. Bolshakov O. P. Education of elements of professional competence among stu-

dents in the process of teaching operative surgery and topographic anatomy // Morphology. 2011. Issue. 2. With. 89–91

4. Dydykin S.S., Zhmerenetsky K.V., Kogut K.V. Ways to improve the surgical training of students in Russia // Bulletin of Surgery. -2017.-Vol. 176.-No. 1.-P.97-101

5. Shurkalin B. K., Gorsky V. A., Gulyaev A. A. et al. Guide to experimental surgery / Ed. prof. B. K. Shurkalina. M.: RSMU , 1998. 100 s

6. Brunt L., Halpin V., Klingensmith M. et al. Accelerated skills preparation and assessment for senior medical students entering surgical internship // J. Am. Coll. Surg. 2008 Vol. 206. P. 897–904.

7. Denadai R., Toledo A., Oshiiwa M., Saad-Hossne R. Acquisition of suture skills during medical graduation by instructor-directed training: a randomized controlled study comparing senior medical students and faculty surgeons // Updates Surg. 2013. Vol. 65. P. 131–140.

8. Gawande A. Creation of the educated surgeon in the 21st century // Am. J. Surg. 2001 Vol. 181, no.6. P. 551–556.

9. Hamaoui K, Saadeddin M, Sadideen H. Surgical skills training: time to start early // Clin. Teach. 2014. Vol. 11. P. 179–183.

10. Klingensmith ME, Brunt LM Focused surgical skills training for senior medical students and interns // Surg. Clin. North Am. 2010 Vol. 90. P. 505–518.

11. Kumar A., Mitra K., Nagarajan S., Poudel B. Factors influencing medical students' choice of future specialization in medical sciences: a cross-sectional questionnaire survey from medical schools in China, Malaysia and regions of South Asian association for regional cooperation // N. Am. J. Med. sci. 2014. Vol. 6. P. 119–125.

12. Leusink A., Hoffman R. 2012. The UCT Surgical Society — a society on the cutting edge // S. Afr. Med. J. 2012. Vol. 102. P. 436–437.

13. Massard G., Rocco G., Venuta F. The European educational platform on thoracic surgery // J. Thorac. Dis. 2014. Vol. 6. P. 276–283.

14. Patel M., Mowlds D., Khalsa B. et al. 2013. Early intervention to promote medical student interest in surgery and the surgical subspecialties // J. Surg. Educ. 2013. Vol. 70. P. 81–86.

16. Ullah S., Bodrogi A., Cristea O. et al. Learning surgically oriented anatomy in a student–run extracurricular club: an education through recreation initiative // Anat. sci. Educ. 2012. Vol. 5. P. 165–170.