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The possibility and effectiveness of training doctors at the postgraduate stage and additional training of students of medical universities by distance education method are indicated. This kind of study in medicine provides a convenient system for obtaining information and allows to expand the thematic range, reduce the training period, and at the same time not to lower the quality, due to the possibility of using almost all forms of training, including independent work in the electronic library.

The article analyzes modern methods of the pedagogical process using various information technologies. The possibility and effectiveness of training doctors at the postgraduate stage and additional training of students of medical universities by distance education method are indicated. This kind of study in medicine provides a convenient system for obtaining information and allows to expand the thematic range, reduce the training period, and at the same time not to lower the quality, due to the possibility of using almost all forms of training, including independent work in the electronic library.

One of the peculiarities of the modern pedagogical process is the widespread use of various information techniques. The use of computers and the internet has become an integral part of higher education. Modern network technologies allow a teacher and a student to conduct training when they are outside the educational establishment. Currently, distance education is becoming increasingly widespread in the world. High technology in education has not bypassed medicine. This type of education embraces higher education the most.

The article analyzes modern methods of the pedagogical process using various information technologies. The possibility and effectiveness of training doctors at the postgraduate stage and additional training of students of medical universities by distance education method are indicated. This kind of study in medicine provides a convenient system for obtaining information and allows to expand the thematic range, reduce the training period, and at the same time not to lower the quality, due to the possibility of using almost all forms of training, including independent work in the electronic library.

Qualitative medical education requires the use of innovative learning technologies. They allow transferring the learning process to a qualitatively higher level. It results in a reorientation of traditional education to a fundamentally new level, where the role of the student changes: he becomes an active participant in the educational process.

Students of medical universities in the process of distance learning should receive the comprehensive technical knowledge required in their future practice. Most of the knowledge cannot be found in printed sources. In order to comprehend the subject thoroughly, students rely on various additional resources. Today, distance education allows designing and creating information tools that can ease these difficulties in the preparation of any discipline.

Distance education is an alternative to additional education of doctors. Remote access to information for rural medicine is particularly appropriate. In rural areas, the electronic medical library can be one of the most effective ways to use information progress in clinical practice.

However, the question arises "Is the distance learning possible in medicine?". Is it possible to develop clinical skills in a distance course without integrated training directly with the teacher?

Unlike humanitarian disciplines, visualization plays a key role in acquiring doctor's knowledge while studying any medical specialty. It is impossible to imagine acquiring knowledge of anatomy without working in sectional studies, the study of histology without working with microslides, the study of surgery without observing operations, etc. The description of the radiological picture of pneumonia can be seen many times in the manuals, but still will not be remembered. But it is enough to see the radiograph once and remember it for life.

There is no doubt that teaching a doctor practical skills requires traditional contact with instructors, but all theoretical training and decision-making exercises can take place in a distant form. Distance learning is not synonymous with "extramural education". It differs from extramural education by a more convenient system of information delivery and the use of new technologies in the learning process, which allows broadening the geography of the course participants and extending the thematic range of courses taught without reducing their quality.

Psychological and pedagogical researches show that the use of electronic educational systems with means of visualization facilitates more successful perception and memorization of educational material. This is due to the activation of simultaneous work of both hemispheres: the left hemisphere usually works in the traditional form of training, and the right hemisphere, responsible for the figurative and emotional perception of the proposed information, is activated when visualized. The result is a creative and professional development of the physician's personality.

Distance education reduces the time of study due to the speed of communication between the teacher and the student, as well as the possibility of using almost all forms of learning (including independent work in an electronic library) [4]. When distance learning students independently regulate the training time required for mastering the study material, tests and the exam within the given period of study.

The implementation of distance learning technologies has particularly affected the postgraduate education of doctors.

A doctor is learning all his life. This is the specifics of the profession. A physician should upgrade his qualification at least once in five years, after which the certificate of professional activity for the next five years can be prolonged. The desire of the specialist to improve knowledge sets the task for educational institutions to optimize the educational process, taking into account both national traditions and principles developed and tested by the international community.
Since most doctors graduated from the higher education establishments more than five years ago, there is a need to build a modular system that allows you to update the theoretical knowledge of medical science to master the practical part of the specialty being studied. In particular, the study of the pathology of a particular disease includes a set of documents (electronic lectures) from anatomical and physiological features, which consists of the following modules: anatomy, physiology, morphology. The lecture on the modern methods of research includes modules with laboratory, instrumental and other types of diagnostics. The notes are represented by illustrative material: tables, drawings, diagrams, algorithms for diagnosis and treatment, photographs of micro- and macro specimens, radiographs, data from computed tomography, etc. All these visual means allow mastering the material better.

The training may be carried out in different ways:
- on-line using the target audience with the help of webinars;
- of-line, where each employee can individually form his or her own training schedule, both in work and in free time;
- mixed - a way to use target audiences for lectures and introductory courses for individually consolidating practical skills.

The organization of distance learning of medical staff at postgraduate and pregraduate education departments includes the following main points:
- definition of courses according to which distance education will be conducted;
- development of the curriculum for distance learning courses;
- group formation;
- distribution of the printed materials on the subject of courses;
- basic knowledge control of the group members;
- a formative assessment of knowledge through testing is conducted during several times per cycle of training;
- short-term seminar and final control.

Advantages of distance education in postgraduate education:
- the qualitative and accessible education is guaranteed;
- opportunity to study at the place of residence; This will expand the range of doctors, especially from rural areas, where insufficient staffing does not allow a break at work for a long time;
- saving time and financial costs. Particularly effective for the preparation of full-time and time-limited doctors;
- use of modern information systems: educational social networks, electronic libraries, online conferences, master classes, testing;
- direct contact with well-known national and foreign specialists: webinars, video conferences, telephone consultations, professional on line training;
- archiving of acquired knowledge.

However, there are certain difficulties that must be taken into account when introducing distance learning into the educational process.

First, distance learning requires significant skilled labor to develop and produce programs that guarantee the high quality of training and, secondly, in our opinion, the most important thing is to ensure the control of the clinical experience. In distance learning, it is difficult to develop clinical skills without integrated learning. The effectiveness and necessity of this direction in medicine requires further improvement and expansion of the use range.

One of the possible methods for the effectiveness of distance learning in medicine is telemedicine (video conferencing, video consultation, etc.). Today, telemedicine has become an integral part of highly professional training in surgery, obstetrics, therapy, cardiology.

Thus, there is an opportunity to get advice on complex patients from leading scientists, specialists of federal clinics, far abroad in real time. These consultations allows doctors to make changes in the diagnostic and therapeutic process, to introduce new therapeutic techniques, to transfer a significant amount of medical literature, which, of course, is an important factor in improving the quality of professional training of medical personnel by virtue of its efficiency and familiarizing health professionals with new knowledge and skills.

All the suggested below conclude that the use of distance learning in medical education can effectively solve current educational tasks of the present: lifelong learning, continuous professional training, a study "without borders" and in interactive mode.

References


Використання можливостей дистанційного навчання у післядипломній освіті

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Резюме. У статті проведено аналіз сучасних методик педагогічного процесу з використанням різноманітних інформаційних технологій. Вказана можливість та ефективність навчання лікарів на післядипломному етапі та додаткової підготовки студентів медичних ВУЗів з використанням методу дистанційної освіти. Цей вид навчання в медицині не тільки забезпечує зручну систему отримання інформації, але й дозволяє розширювати тематичний діапазон, скорочити час навчання, не знижуючи якості, здійснюючи можливість використання майже всіх форм навчання, у тому числі, самостійної роботи в електронній бібліотеці.

Ключові слова: дистанційне навчання; післядипломна освіта.

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Іспользование возможностей дистанционного обучения в последипломном образовании

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Резюме. В статье проведен анализ современных методик педагогического процесса с использованием разнообразных информационных технологий. Показана возможность и эффективность обучения врачей на последипломном этапе и дополнительной подготовки студентов медицинских ВУЗов методом дистанционного обучения. Этот вид обучения в медицине не только обеспечивает удобную систему получения информации, но и позволяет расширять тематический диапазон, сократить время обучения, не снижая качества, благодаря возможности использования почти всех форм обучения, в том числе, самостоятельной работы в электронной библиотеке.

Ключевые слова: дистанционное обучение; последипломное образование.

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