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**FEATURES OF DISTANCE LEARNING FOR MEDICAL STUDENTS IN  
THE CONVENTION OF THE COVID-19 PANDEMIC****ОСОБЛИВОСТІ ДИСТАНЦІЙНОГО НАВЧАННЯ СТУДЕНТІВ МЕДИКІВ В  
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**Abstract.** *In the context of the COVID-19 pandemic, distance learning allows to continue the learning process and online to assess the success of students during the quarantine period and ensure their continuous professional development. To improve the availability of teaching materials, increase contact between teacher and student, it is necessary to involve interactive platforms that will improve the teaching process and the assimilation of the necessary teaching material.*

**Keywords:** *distance learning, covid-19, medical education.*

**Introduction.**

For many years, teachers of higher medical schools have argued that distance learning in medicine does not exist. What about distance learning or even online learning? However, the Covid pandemic of 2019 has made its adjustments to the usual way of life and education in all higher education institutions around the world. The spread of COVID-19 coronavirus infection in the world and in Ukraine has led to special attention to the development of distance learning of medical students, which allows not to stop the educational process and online to assess the success of students during quarantine and ensure their continuing professional development in formal education.

**The main text**

According to the concept of distance education development in Ukraine, distance education is a form of learning equivalent to full-time, part-time, part-time and external studies, which is implemented mainly by distance learning technologies. In the West, distance learning is known as "correspondence" (The Distance Education and Training Council - has existed since 1926). Some scholars believe that the idea of distance learning dates back to the seventeenth century, when St. Paul sent oral references to Christians. It is believed that there were 5 "information revolutions". The first "information revolution" is considered to be the development of language as a source of communication. The second is writing and book printing. The third made the information public. The fourth "information revolution" involved the use of



electronic equipment, which enabled the rapid dissemination of information. The fifth stage is characterized by the creation of high-speed computers, filling automated databases, the creation and rapid development of communication networks [1]. Scientific and technological progress does not stand still. In many of the world's leading universities, distance learning has existed for many years and is quite effective. For example, in the United States and Canada, as an alternative to traditional learning, virtual universities have been established, where each student can receive education in basic distance courses at any university. Open universities of distance education have been established in Europe, a group of educational institutions that implement distance learning programs. The methods of such training include the use of new information technologies, which include satellite television, computer networks, multimedia, etc. Among the world's leading educational institutions, such as the National University of Technology (USA), Shanghai University (PRC), relatively new distance education and self-education institutions such as TV universities, tutoring centers (multimedia learning), and information centers (Internet) have been established and gained popularity. training) [2].

The scientific and theoretical level of relevance of online learning before the pandemic was associated with finding ways to improve the quality of medical training, professional competence of physicians, which necessitated a review of the content and technology of the educational process, the introduction of information and communication and distance learning technologies [3]. Distance education in institutions of higher medical education in 2020 took a monopoly place among the forms of education, due to social processes in society. As scientists IL Shinkovskaya and IP Zayets note, "the success of distance learning depends on its effective organization, on the management of the process itself and on the skills of the teachers who take part in it." Historical analysis of the development of pedagogical theories shows that distance learning developed in three stages. The first phase began with the PLATO and TICET projects, which were implemented by the University of Illinois at the request of the US Department of Education. Behavioral and cognitive pedagogical theories were the basis of computer courses (only in the 1990s they appeared on the Internet). The main approaches and technologies include Ganier's method (pedagogical design), postal services, television and radio, books, telephone, presentation technologies on electronic media and interactive technologies (animations, interactive tests, adaptive hypermedia in the last stages). The second stage of the development of distance learning is associated with the use of social constructivism, began approximately in 2000, when the development of distance learning began in Ukraine. The dominant technologies were e-mail, forums, conferences. It was a step forward, but behavioral approaches remained relevant. In 2008, the third stage of distance learning development began, which is based on a connectivist approach. Dominant technologies are blogs, wikis, social bookmarks, file sharing, social networks, aggregators and others, which have the general name "social services". Distance courses at this stage are free and open and rely on the free educational resources that the Massachusetts Institute of Technology began offering 10 years ago. Distance learning and its implementation as a kind of work with educational material in the space of the distance course at the beginning of



development did not cause special questions about the organization and management of educational activities. The content of the information that was intended for processing and assimilation, the structure and means of activity resembled the same approaches that were provided by the authors of the textbooks. The necessary interaction and communication with both the training material and training colleagues were provided through online services (e-mail, mailing lists, forum, chat, etc.). All this was a bit like the conditions of distance learning and for this reason it was under this name was entered in government documents. However, almost at the same time it became clear that the distance learning process in contrast to distance learning can provide some freedoms to students to create the conditions for their own learning activities. These freedoms included: choice of place of study, time of study and form of study. Free and unlimited access to information due to the use of information and communication technologies and the possibility of constant communication and communication on teaching issues with the teacher were also very attractive [4].

In medical higher education, distance learning is somewhat difficult, as the basis of medical education is professional orientation, which is important given that the self-awareness and competence of the medical student will further affect the health and possibly human life. Therefore, during practical classes, a variety of models, simulators, virtual simulators and other technical learning tools are widely used. Bukovinian State Medical University was one of the first in Ukraine to create a simulation center to improve the acquisition of various practical skills of students. Live communication with specialized patients is especially important. An interpersonal relationship should be established between the doctor and the patient, because the interaction between them is not a simple exchange of information, but part of the treatment process. To paraphrase the statement of our famous compatriot VM Bekhterev, if the patient after meeting with the doctor did not feel relief, it was not the doctor. After all, the treatment process involves a combination of both somatic and psychological effects on the patient. Conversation with the patient, the ability to penetrate the patient's psychology, the ability to separate the main from the secondary, to differentiate the main symptoms of the disease, to diagnose and prescribe effective treatment - this is the art acquired during higher education. A prerequisite for this is communication with experienced teachers who motivate, guide and coordinate the learning process and help in communication with patients. Communication with patients is somewhat difficult during distance learning. However, we must be able to meet the challenges of time. The coronavirus pandemic has set us the task of preserving the medical education system.

Bukovinian State Medical University used modern technologies for distance learning - the Google Meet platform. As well as the Moodle distance learning server, which existed before the pandemic to facilitate the preparation of students for practical training. Methodical materials of departments, textbooks, articles of domestic and foreign authors, presentations of lectures, test tasks are placed in Moodle. Teachers were forced to learn to work with remote platforms in a short time. During the distance learning, teachers at the Department of Internal Medicine considered the topic of the lesson with the help of presentations and videos with a profile patient. In addition, students underwent routine testing (determining the initial



and final level of knowledge). Special presentations for the theoretical part, presentations for practical skills (with clinical tasks with analysis of biochemical and instrumental research results) were also used to compile the final modular control. The positive aspects of distance learning are: the ability to use interactive teaching methods more widely; equal opportunities for education - regardless of the state of health and financial security of the student; stimulating the medical student to self-organization, self-discipline, independent mastery of the material and independent decision-making, while increasing his intellectual potential; encouraging medical students to improve computer skills; updating the role of the teacher, who should increase pedagogical activity and qualification in accordance with innovations and innovations. However, the negative feature of distance learning was the lack of live communication between teacher and student. It also does not promote the socialization of students because they do not have the opportunity to communicate with each other. Distance learning is also called "adult", ie with a high level of educational self-motivation. Students must be sufficiently conscious, purposeful and persistent.

### **Conclusion and findings**

In the context of the COVID-19 pandemic, distance learning is one of the world's leading trends in education. Distance learning provides higher education students with access to non-traditional sources of information, increases the efficiency of independent work, provides completely new opportunities for creative self-expression, finding and consolidating various professional skills, and teachers in turn allows to implement completely new forms and methods of conceptual and mathematical learning. modeling of phenomena and processes. The development of distance learning will continue and improve with the development of Internet technologies and the improvement of distance learning methods.

### **References**

1. Sahan N.T., Zaiats L.M., Zhurakivska O.Ia., Antymys O.V., Dutchak U.M., Miskiv V.A. Dystantsiine navchannia v medychnomu vuzi – realii sohodennia // Innovatsiina pedahohika. - 2021. - Vypusk 31. T. 1. - S. 153-156.
2. Datsenko H.V., Suzanska Z.V. Dystantsiine navchannia yak zasib stymuliuvannia samoosvity. Dystantsiine navchannia yak suchasna osvittia tekhnolohiia [Elektronnyi resurs]: materialy mizhvuzivskoho vebinaru (m. Vinnytsia, 31 bereznia 2017 r.) / vidp. red. L.B.Lishchynska. – Vinnytsia: VTEI KNTEU, 2017. – 102 s.
3. Kushch O.H., Omelianchyk V.M., Bessarab H.I., Zhernova N.P., Stepanova N.V., Tykhonovska M.A., Morozova O.V., Sukhomlinova I.E. Dystantsiine navchannia v systemi medychnoi osvity (pershyi dosvid kafedry normalnoi fiziolohii ZDMU) // Medychna osvita. - 2017. - №4. - S. 85-89.
4. Pedahohichni aspekty vidkrytoho dystantsiinoho navchannia / Andrieiev O.V., Buhaichuk K.L., Kalinenko N.O., Kolhatin O.H., Kukharenko V.M., Liulkun N.A., Liakhotska L.L., Syrotenko N.H., Tverdokhliebova N.Ie., Pod red. Andrieieva O.O., Kukharenka V.M. - Kharkiv: 2013. - 208 s.



**Анотація.** В умовах пандемії COVID-19 дистанційне навчання дозволяє не припиняти навчальний процес та он-лайн оцінювати успішність здобувачів освіти протягом періоду карантину і забезпечувати їх безперервний професійний розвиток. Для покращення доступності навчально-методичних матеріалів, збільшення контакту між викладачем і студентом необхідно залучати інтерактивні платформи, які дозволять покращити процес викладання та засвоєння необхідного навчального матеріалу.

**Ключові слова:** дистанційне навчання, covid-19, медична освіта.