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**TEACHING OF CLINICAL PHARMACY TO PHARMACISTS AT THE  
FACULTY OF POSTGRADUATE EDUCATION USING THE  
OPPORTUNITIES OF DISTANCE EDUCATION**

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**Abstract** The main task of the organization of professionally-oriented education are the methodological support of the educational process and the practical activities of future pharmacists. The main areas of study related to the introduction of the newest information and educational technologies in the educational process during quarantine.

Combining methodological support and digital forms of education, we create the informational educational object of the department in which separate structural components are distinguished: texts of information, test tasks, presentations of lectures, which are implemented by the computer. Improving the quality of postgraduate education should enhance the qualifications of specialists, given that the pharmacist learns in the process of professional activity.

**Keywords:** postgraduate education, pharmacy, distance learning.

Professionally-oriented education is the leading concept and the latest trend in modern educational activities. Quality learning and professional development of the future pharmacy specialist is impossible without a supportive environment and appropriate conditions for formation of the professional identity of the future specialist despite the conditions dictated by the Covid-19 pandemic.

Higher education institutions were forced to switch to distance learning of the contingent due to the global Covid-19 pandemic in 2020. At the same time, maintaining the quality of the educational process was of great importance, especially in the medical and pharmaceutical fields.

The main principles of the organization of professionally-oriented education are the methodological support of the educational process and the practical activities of future pharmacy professionals [1, p.37].

Conscious professional thinking of pharmacists-interns is important when making practical decisions, so the task of pharmacists-interns in this approach to learning is to acquire new knowledge and form practical experience for their use [2, p.6]. The role of the teacher should be aimed at selecting such tasks that can provide professional content and to strengthen independence in solving them.

The main areas of study related to the introduction of the newest information and educational technologies in the educational process during quarantine were: the use of electronic resources of the department; online courses on the edX platform, which is installed on the basis of Azure cloud services; MS Teams and Forms applications MS Office 365, Skype technology.

Combining methodological support and informational forms of education, we create the informational educational object of the department in which separate structural components are distinguished: texts of information, test tasks, presentations of lectures, which are implemented by the computer [3, p. 530]. Information technology is important in professionally-oriented education when using distance learning.

During the quarantine, the second important condition was methodological and informational support and support of independent work of pharmacists - interns.

Independent work is carried out in the terms determined by the calendar-thematic plan and the schedule of employment. The pharmacist may consult via e-mail and other possible means of communication when performing independent work.

A special stage of the educational process was the enrollment of independent work in the disciplines of the department [4, p. 727,5, p. 48]. Pharmacists-interns, who registered in person for online courses, had the opportunity to receive a Certificate, which was presented in person before the interview.

It should be noted that it is better to ensure the passage of the tests and certification in the eye form in the interview with the teacher even in distance education, but the flexible schedule, due to the pandemic and the ever-changing rules, we can conduct tests with MS Office 365 and their services.

Teachers have developed an algorithm for conducting practical and seminar classes in the disciplines of the department, methodological support of the forms of educational process. The materials were brought to the attention of pharmacists-interns through electronic resources of the department. According to the schedule, classes were conducted using distance-learning forms: resources Office 365 MS Teams and Forms.

The distribution of study hours is carried out in accordance with the Technology Map (seminar, practical lesson in the discipline using Office 365 resources for 2 hours of connection). Stages of classes are carried out with the specified regulations of the allotted time in minutes accompanied by educational material (guidelines, information material on the topic, etc.). After the Organizational part and the discussion of training sessions, pharmacists - interns perform under the supervision of the teacher tasks listed in the guidelines. During the performance the teacher includes a presentation with a minute-by-minute support of the work of pharmacists - interns, which indicates the stages of work, taking into account 6 stages of 13 minutes. During the accompaniment, the teacher adjusts the lessons, answers questions. Each lesson ends with the completion of the final control task, which the pharmacist-intern lays out in the appropriate section Teams.

State certification was conducted in a mixed form. Practice skills and

computer-based testing were conducted online using MS Teams and Forms applications, and interviews were conducted offline by SAC members.

The channel in the MS Stream service contains video lectures on the disciplines "Clinical Pharmacy", "Social-communicative and information technologies of pharmacy", "Pharmacognosy", "Pharmaceutical analysis", "Special training" according to the Work programs (10 lectures).

To optimize and effectively use the time of pharmacists - interns during the face-to-face period of the internship, online courses with video content from the disciplines in the sections of independent work [6, p. 346] by the Work programs of the disciplines, which are presented and work on the EDX platform.

Teachers of the department received a Certificate of MS recognition in the field of education under the program: "Certified Microsoft Innovative Educator".

**Conclusion:** Continuous improvement of postgraduate education should improve the professional skills of specialists, paying attention to the fact that the pharmacist is learning during the professional activity.

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