

http://www.moderntechno.de/index.php/meit/article/view/meit21-02-030

DOI: 10.30890/2567-5273.2022-21-02-030

УДК: 378.147.091.33-027.22:616.9

## APPLICATION OF THE CASE METHOD IN THE EDUCATIONAL PROCESS IN STUDYING THE COURSE OF INFECTIOUS DISEASES ЗАСТОСУВАННЯ КЕЙС-МЕТОДУ В НАВЧАЛЬНОМУ ПРОЦЕСІ ПРИ ВИВЧЕННІ КУРСУ ІНФЕКЦІЙНИХ ХВОРОБ

Myronyk O.V./Мироник О.В.

c.med.s., as.prof., / к.мед.н., доц. ORCID: 0000-0002-5717-7267

Davydenko O.M./ Давиденко О.М.

c.med.s., as.prof./к.мед.н., доц. ORCID: 0000-0002-8897-8913

Bukovinian State Medical University, Chernivtsi, Teatral'na Sq., 2, 58000 Буковинський державний медичний університет, Театральна площа, 2, 58000

Анотація. В роботі проведено порівняльний аналіз традиційної форми навчання та використання кейс-методу при вивченні теми "«Дитячі» крапельні інфекції (кір, краснуха, епідемічний паротит) у дорослих. Герпесвірусні інфекції 1-5 типів (простий герпес, вітряна віспа і оперізувальний герпес, ВЕБ- та цитомегаловірусна інфекції (інфекційний мононуклеоз)." Показана перевага використання кейс-методу в навчальному процесі із студентами медиками.

Ключові слова: кейс-метод, навчання, студенти

**Introduction** Today there is a modernization and development of higher medical school through the introduction of high-tech, effective, innovative teaching methods that involve medical students in the process of active clinical thinking [3, 4].

Optimization of the educational process involves a comprehensive approach to solving a number of problems in order to improve the quality of training. At present, it is no longer possible to limit oneself to such requirements for students as competence in knowledge, skills and abilities. In all areas there is a need for a more competitive specialist who can work in a team, able to generate ideas and technologies for their implementation, has a tendency to innovate, can critically, efficiently and analytically work with huge amounts of information of various kinds.

A special role in this process belongs to information and communication technologies (ICT), among which the most important for the development of clinical disciplines are: distance technology, game technology (game learning), integrated learning, interactive (programmable, computer, multimedia), information) technologies, case technologies, collective methods of teaching, test (diagnostic, credit-rating) technologies, technologies of personality-oriented education, etc. [1].

When using ICT, the study of the subject becomes an interesting, attractive, creative activity, which improves the quality of education. The most important in the use of ICT is the opportunity to diversify practical classes with vivid manuals, visual examples, interactive tests and tasks that promote the development of medical thinking skills in medical students, forcing them to take an active part in the structure and process [5].

The main text We conducted a comparative analysis of the application of innovative methods of teaching the subject "Infectious Diseases" - case methods and



traditional methods of teaching 5th year medical students of BSMU.

We used case methods in the structure of the lesson on the same topic "Children's" drip infections (measles, rubella, mumps) in adults. Herpesvirus infections 1-5 types (herpes simplex, chicken pox and shingles, WEB and cytomegalovirus infection (infectious mononucleosis). "in students.

This section is studied in the 5th year and requires from the student deep knowledge of fundamental disciplines: pathological anatomy, pathological physiology, histology, microbiology, biochemistry, pharmacology, as well as therapeutic disciplines: therapy, gastroenterology and more. Such interdisciplinary horizontal integration is extremely necessary for students' comprehensive perception of etiopathogenesis, clinical manifestations of the disease and understanding of the problem of treatment of patients with diseases with airborne mechanism of infection. To find rational ways to solve the problem and master the necessary practical skills, students are asked to analyze the clinical situation on a specific topic of practical training, which allows you to use the acquired knowledge from related disciplines. As material for cases, we use photographs of clinical manifestations of the disease, to which tasks or questions are developed.

All students were divided into 2 groups of levels by quantitative composition. The first group studied according to standard methods. The second - using the case method.

Indicators of material availability, degree of memorization, degree of student activity in class were evaluated. In addition, in order to objectify the results, uniform tests on the topic of the lesson were used. The analysis of the obtained data revealed that regardless of the initial level of preparation of students in groups where case methods were used, significantly more significant results were obtained on the evaluated parameters than in groups with a traditional teaching system. Thus, greater interest of students in analyzing the topic, greater activity and motivational interest in discussing clinical situations that require specific tasks, more active participation in cases of collegial analysis was observed in students of group 2 (21%). There was also a more competent interpretation and use of previously acquired knowledge in basic disciplines.

The test confirmed the subjective assessment, finding a higher percentage of correct answers in the groups engaged in the use of case methods (86%) compared with the groups of students engaged in the standard method (73%).

Active learning, in particular the case method, is significantly different from passive: forced activation of thinking is used, when the subject is forced to be active regardless of desire, because their activity should not be short-term or episodic, but largely stable and long (throughout occupation); active learning stimulates independent creative decision-making, increasing the degree of motivation and emotionality of students.

This approach is directed beyond the educational space, goes into the field of professional solutions to problems in a particular field of knowledge, forms interest and profile motivation. It opens up opportunities for future professionals to study complex and professionally significant issues in an emotionally favorable atmosphere of the educational process, to use the experience gained in real practice.



## **Conclusions**

- 1. The use of case methods allows you to simulate any clinical situation necessary for students' knowledge, followed by in-depth analysis and analysis.
- 2. The use of innovative teaching methods in the structure of classes on infectious diseases has led to a more significant assimilation of material by students, especially the clinical part.
- 3. The use of case methods allows to bring students as close as possible to the conditions of real clinical practice, to feel the complexity of the doctor's work, especially in urgent situations and develops the skills to quickly make the right medical decision.

## **References:**

- 1. Koshechko I. Innovatsiini osvitni tekhnolohii navchannia ta vykladannia u vyshchii shkoli / I. Koshechko // Pedahohika. №1(1). 2015. S. 35–38.
- 2. Melnykov S.V. Obrazovatelnыe tekhnolohyy v vuze novыe podkhodы / S.V. Melnykov // Razvytye sovremennoho obrazovanyia: teoryia, metodyka y praktyka : materyalы VII Mezhdunar. nauch.-prakt. konf., Cheboksarы, 29 maia 2016 h. / redkol.: O.N. Shyrokov [y dr.] Cheboksarы: "Ynteraktyv plius", 2016. S.207–218.
- 3. Мыпbaeva A.K. Ynnovatsyonnыi орыt vnedrenyia novыkh metodov obuchenyia v uchebnыi protsess / A.K. Мыnbaeva // http://www.rusnauka.com/ 10 DN 2014/Pedagogica/5 163666.doc.htm].
- 4. Tuchalaev S. T. Novыe pedahohycheskye tekhnolohyy / S.T. Tuchalaev // Makhachkala: "Alef", 2015. 172 s.
- 5. Tuchalaev S. T. Metodolohycheskaia refleksyia problemы razvytyia lychnosty v tekhnolohyy razvyvaiushcheho obuchenyia / S.T. Tuchalaev, Kh.M. Myn- bulatov // Pedahohyka. 2010. № 10. S. 117–119.

## Література

- 1. Кошечко І. Інноваційні освітні технології навчання та викладання у вищій школі / І. Кошечко // Педагогіка. №1(1). 2015. С. 35–38.
- 2. Мельников С.В. Образовательные технологии в вузе новые под- ходы / С.В. Мельников // Развитие современного образования: теория, методика и практика : материалы VII Междунар. науч.-практ. конф., Че- боксары, 29 мая 2016 г. / редкол.: О.Н. Широков [и др.] Чебоксары: "Интерактив плюс", 2016. C. 207-218.
- 3. Мынбаева А.К. Инновационный опыт внедрения новых методов обучения в учебный процесс / А.К. Мынбаева // <a href="http://www.rusnauka.com/">http://www.rusnauka.com/</a> 10 DN 2014/Pedagogica/5 163666.doc.htm].
- 4. Тучалаев С. Т. Новые педагогические технологии / С.Т. Тучалаев // Махачкала: "Алеф", 2015.-172 с.
- 5. Тучалаев С. Т. Методологическая рефлексия проблемы развития личности в технологии развивающего обучения / С.Т. Тучалаев, Х.М. Мин- булатов // Педагогика. 2010. N 10. С. 117–119.

**Abstract.** A comparative analysis of the traditional form of training and the use of the case method in the study of the topic "Children's" drip infections (measles, rubella, mumps) in adults. Herpesvirus infections 1-5 types (herpes simplex, chickenpox and shingles, WEB) - and cytomegalovirus infections (infectious mononucleosis). "The advantage of using the case method in the educational process with medical students is shown.

**Key words:** case method, training, students