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Method of Cooperative Learning Groups as a Means of Optimizing Learning Process in Medical Education

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Abstract. Training of medical specialists in Ukraine under modern conditions requires integration into the European educational process that involves the use of new techniques, interactive methods to improve motivation and develop the ability to think scientifically. It will allow us to realize the goal of high school, namely training of highly qualified doctors ready to deal effectively with the specialty at the international level. The method of cooperative learning groups allows us to engage more students, develop their interpersonal communication, and enhance control of individual and group accountability. Each student has the opportunity to develop skills to perceive visual and verbal information professionally, comprehend and make decisions independently, improve their organizational and communication skills.

Keywords: *medical education; cooperative method; ophthalmology*

Training of medical specialists in high educational institutions under modern conditions of Ukrainian integration into the European educational process requires a revision of teaching methods [1, 2]. The criteria for successful mastering the learning materials should include not only the accumulated academic knowledge, but also research activity and students' ability to think independently, scientifically, creatively and logically since higher education institutions are aimed at training of highly qualified professionals who are ready for responsible and effective activities in their field at the international level [5].

An innovative learning approach can be based on the use of interactive methods such as cooperative and competitive discussion groups, case studies, brainstorming sessions etc. [6].

Cooperative learning involves working in small groups. It is an “educational cooperation” where each student's contribution is important for others, since without it some part of the information will be lost, thus successful task execution will be impossible. For each group, individual tasks and instructions for their completion are developed. Group members work on their own parts of the material until they come to a logical conclusion. This division of the responsibilities within subgroup and tasks between different groups significantly saves time. It also trains cooperation skills, activates individual responsibility, and prepares students for future work in teams [4, 6].

When studying ophthalmology, the method of cooperative groups is widely used in the study of uveal tract diseases which in 50% of cases occur due to endogenous infectious agents. Making a correct diagnosis in this case should be based not only on the data obtained when examining the eye, but also on a deep knowledge of common diseases and syndromes including ocular symptoms (tuberculosis, sarcoidosis, rheumatism, Behcet's disease, ankylosing spondylitis, Lyme borreliosis etc.).

Thus, the approximate distribution of tasks between cooperative groups might look like this: Group 1 - collection of complaints and medical history to identify possible causes of the disease; Group 2 - study of visual functions and objective symptoms; Group 3 - examination of the results of additional methods (laboratory/instrumental methods) to clarify the etiology; Group 4 - development of the scheme for treatment based on local and general manifestations of the disease.

The work in the subgroup ends when studied problem is completely understood. Next stage includes exchange of information between subgroups. Students address questions to each other and specify the correctness of the results. In

the end a holistic understanding of medical case should be formed: from the patient's complaints to prescribing appropriate etiological and pathogenetic treatment.

The method of cooperative learning groups allows the teacher to work simultaneously with more students. It also develops interpersonal communication between future doctors, facilitates positive interdependence, and enhances control of individual and group accountability. While training, every student has the opportunity to improve his/her professional, organizational, and communication skills, as well as develop skills to perceive visual and verbal information professionally, comprehend and take decisions independently.

References

1. Barinov EF, Sulaieva OM, Nikolenko OH, Tereshchuk BP. Modern approaches to the creation of multimedia programs and films for the realization of problem-based learning in medical schools. *Medychna osvita*. 2009;3:5-8.
2. Bachynska YeM. Mechanism of formation of innovative learning space in the region. *Pedahohika i psykhohihiia. Visn. APN Ukrainy*. 2007;1:79-88.
3. Dobrovska LM. Information technologies as a means of formation of medical thinking at preclinical stage of medical students' training. *Pedahohika i psykhohihiia profesiinoi osvity*. 1998;2:93-97.
4. Diachenko VK. Method of collective learning. *Didaktika v dialogakh. Narodnoe obrazovanie. Moscow*. 2004;352.
5. Zaichuk OV. Quality management in education as a component of state education policy. *Pedahohika i psykhohihiia. Visn. APN Ukrainy*. 2007;2:18-26.
6. Kukushyn VS. Theory and methodology of learning. *Feniks. Rostov-na-Donu*. 2005;174.