A new era of learning and teaching skills-is case based learning our future?

Ana Lesac Brizić¹, Tina Zavidić¹, Branislava Popović¹

Traditional lectures are the most commonly adopted method in medical and clinical teaching, and they efficiently deliver the theoretical knowledge. However, more than this learning method is needed, especially for students who should develop their communicational skills, as well as clinical-thinking skills. Clinical skills are essential for good professional practice and more clinical skills training is needed today. Some studies have shown the advantages of either problem-based learning (PBL) or case-based learning (CBL) in relation to traditional learning.

During the current academic year at the University of Rijeka, Faculty of Medicine, the Family Medicine course consisted of 30 hours of lectures, 30 hours of seminars and 100 hours of practical exercises: a total of 160 hours (6 ECTS). The lectures were designed as traditional ex-cathedra lectures about clinical conditions. For the seminars, students were required to theoretically prepare for seminar, to be able to solve a clinical problem based on the presented case scenario, individually or in smaller groups. Then, they presented the case and the solution to the medical problem to the rest of the seminar group. The practical exercises were held in family medicine offices and students were introduced to the organization of family medicine practices. Students had to actively participate in practical exercises by performing clinical examinations, diagnostic procedures (sampling, otoscopy, rhinoscopy, dermatoscopy, electrocardiography, spirometry, ultrasound), parenteral drug administration, wound treatment, rational drug prescribing and at-home visits. This way students learn to interact with their basic knowledge by working with situations from real practice of their mentors. They have to use critical thinking skills, identify problem, offer different solutions and choose the best on their own.

Promoting case-based learning is a challenge in any teaching method and should be employed more often. Family medicine teachers do not have to invent or buy prepared cases from publishers, they create their our own, based on experience and practice, and should use them as often as possible.

Keywords: case-based learning, family medicine, problem-based learning, undergraduate medical education

References:

- 1. Zhao W, He L, Deng W, Zhu J, Su A, Zhang Y. The effectiveness of the combined problem-based learning (PBL) and case-based learning (CBL) teaching method in the clinical practical teaching of thyroid disease. *BMC Med Educ*. 2020;20(1):381. Published 2020 Oct 22. doi:10.1186/s12909-020-02306-y
- 2. Offiah G, Ekpotu LP, Murphy S, et al. Evaluation of medical student retention of clinical skills following simulation training. *BMC Med Educ*. 2019;19(1):263. Published 2019 Jul 16. doi:10.1186/s12909-019-1663-2

¹ University of Rijeka, Faculty of medicine, Department of Family Medicine, Croatia

- 3. Evans DB, Henschen BL, Poncelet AN, Wilkerson L, Ogur B. Continuity in Undergraduate Medical Education: Mission Not Accomplished. *J Gen Intern Med*. 2019;34(10):2254-2259. doi:10.1007/s11606-019-04949-0
- 4. Koch R, Braun J, Joos S. Feedback in family medicine clerkships: a qualitative interview study of stakeholders in community-based teaching. *Med Educ Online*. 2022;27(1):2077687. doi:10.1080/10872981.2022.2077687