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THE EFFECTIVENESS OF PROBLEM-BASED LEARNING IN MEDICAL HIGHER EDUCATION IN UKRAINE

This paper is an attempt to describe current methods for assessing the quality of medical higher education using problem-based learning and to suggest some directions for implementing it. The aim of this study was to investigate the effectiveness of problem-based learning as a student-centered approach which can provide students more opportunities for application of knowledge acquired from basic science to the real life situations than traditional lecture-based learning approach.

Having declared the course to European integration as a priority vector of its public and educational progress, including the issues of medical education development, the reforms of higher medical education and health care in Ukraine contribute to find solutions for building a new European standard model of education where students are active learners rather than spectators. Improving the quality and effectiveness of future medical professionals has become an issue of importance as the landscape of national higher education has been facing continuous changes [1]. The quality of higher medical education is essential to the development of modern education connecting the learning and teaching to the “real-world” practice. The purpose is to engage medical students in meaningful enquiry-based learning that has genuine value and relevance for them personally and their communities. The research proves without opportunities to practise and apply new knowledge in a variety of contexts, adaptation and integration of new knowledge will not be achieved.

Problem-based learning (PBL) allows medical students to apply their knowledge in a very practical way. Traditional approaches in teaching concentrate on factual knowledge and memorization, without considering medical students’ applicability in the future professional career, however, PBL focuses on flexible knowledge, improved communication, collaborative skills and self-directed learning skills, and a more enjoyable and motivational process of studying.

PBL is defined as a student-centered teaching method in which participants are allocated in groups of up to 10 persons under non-directive tutors and given tasks or challenges that reflect situations relevant to the working environments they will experience. In this way, the learners are empowered to integrate theory and practice, and apply knowledge and skills to develop a viable solution to the problem [2, 3]

The process of collaboration provokes learners to consider new uses for knowledge with their peers and develop new insights for future application. During the problem-based learning process, medical students also engage critical thinking, leadership, working in peers and other essential 21st century skills. It is generally recognized that twenty-first century competencies and skills are complex and often challenging to teach. Despite worldwide agreement that learners need skills such as critical thinking and the

ability to communicate effectively, innovate and solve problems through negotiation and collaboration, pedagogy has not adapted to address these new challenges

Our research proved PBL students scored comparably or better than traditionally taught groups in clinical skills. Our research included 30 medical students (two groups of 15 students each). For two months, one group was trained with traditional method and another group underwent problem-based learning method on selected subject materials. In each method, a pre-course test at the beginning and a post-course test at the end of each course were given to each group. The questionnaire used in this study as the instrument was composed of 50 multiple choice questions. Two tutors of clinical disciplines, two associate professors took part in the training. Scores obtained from these tests were analyzed. There was a significant difference between the mean scores of post-course exams of the two groups, while no significant difference was observed between the mean scores of pre-course exams of the groups.

The research and our studies prove the effectiveness of PBL pedagogy in preventive medicine education. All things considered, the 'transmission' model is highly ineffective for teaching twenty-first century skills, promoting learner autonomy and creativity is part of the solution.

Our results suggest that problem-based learning of preventive medicine education in Ukraine appears to be more effective than traditional in improving knowledge, attitude and skills.

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