SCIENCE AND LIFE

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Czech Republic, Karlovy Vary - Kyiv, Ukraine
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FORMATION COMPETENCES AT LABORATORY-PRACTICAL LESSONS IN "MEDICAL CHEMISTRY"

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The contemporary high education serves primarily as a basis for the harmonic development of a personality and, specifically, an instrument for training qualified specialists. The burning issue of the modern Ukrainian professional high education lies in the search after methods of improving scientific-theoretical and practical training of future specialists. Of late, special attention has been fixed on the need of reforming our education on the whole and medical education in particular. At present, therefore, the topical task is to seek for innovational methods, which would make it possible for us to train competent and competitive leaders of their profession.

The special place in the array of obtaining professional knowledge and forming professional skills by medical students belongs to Natural Sciences, with “Medical Chemistry” being of the paramount importance among them. One of the basic subjects, this science is studied by freshmen at Kharkiv National Medical University (KNMU). A discipline in the system of the medical education, “Medical Chemistry” serves as a foundation of studying clinical subjects in senior students’ years and as an important condition for encouraging students to build their motivation to study at the medical university, to make use of system thinking and learn to regard both their theoretical and practical knowledge as a value. The principal point of the teacters of Medical Chemistry is aimed at providing general chemical training of future doctors and imparting them the fundamental knowledge of laws and theories, necessary for commanding other subjects, as well as making students understand interdisciplinary links.

We should note that, with the globalised education, the world’s modern tendencies oblige us to implement world’s standards of this field in the education of Ukraine. The issues of how to put into practice international standards and requirements to the value of education were studied by many scholars, notably: O.I. Volkov, L.M. Vitkin, H.I. Khimichev, A.S. Zenkin, I.Y. Bulakh, O.P. Volosovets and others [1-3].

The competence approach to educational activity and the idea of non-stop professional education are known to be some of the effective means of improving teaching as a process. Current dynamic changes make it impossible for a qualified specialist only to transmit and reproduce the covered material. It is this view of the teaching process, which accounts for the need in the no-stop professional education.

The curriculum “Medical Chemistry” as a discipline at KNMU is directed at forming basic competences in medical students. Laboratory-practical lessons are composed in such a way so that at the beginning students should pass tests checking and controlling their knowledge. This procedure allows us to estimate students’ independent work forming competences, associated with the skill to conduct a purposeful search, collect and summarize scientific information while preparing for their lessons [4, 5].

Next, theoretical issues are discussed, with particular attention of students drawn to the connection between the topic of the lesson and medicine. Thus, students become motivated to study the theme. Graphical logical plans of lessons are actively used at laboratory-practical lessons to let students get acquainted with the most vital issues of the theme and form a systemic perception of points under study. Meanwhile, students are actively involved in discussing theoretical basics of the theme and solving problematic tasks in their workbooks. Students' oral answers allow us to develop their clinical thinking and speech and transmit more accurate knowledge to them.

We should draw our attention to the fact that, according to the curriculum "Medical Chemistry" as a discipline at the Department of Medical and Bioorganic Chemistry of KNMU, every laboratory-practical lesson presupposes doing a laboratory work. Developing a laboratory work is based on the key concept of the living organism, so that while doing this work future doctors could learn to understand the main physical and chemical processes running in the organism. We should remark that, at present with Physical Chemistry along with dynamically developing Biochemistry and Molecular Biology as branches of biomedicine, it is very important for students to understand their basic regularities from the first year of their studies.

The last stage of a laboratory-practical lessons lies in solving situational tasks and passing final control tests to sum up results and allow us to make an overall evaluation of students' work at a class [7-10].

The simultaneous usage of students' oral answers, conduction of tests and assessment of their practical skills while doing a laboratory work make it possible for us to evaluate their knowledge and skills on the whole and with maximum impartiality. Thus, practical-laboratory lessons in "Medical Chemistry" go off very dynamically, with students resorting to some elements of collective and independent work.

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