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R.I. Belehaj

Features of the Final Module Control in Clinical Pharmacology

Ivano-Frankivsk National Medical University, Ivano-Frankivsk, Ukraine

Abstract.

The article is devoted to the organization of the final module control in Clinical Pharmacology. The attention is paid to the importance of this training activity form in the education of future doctors, especially in the context of the Bologna process. The presented experience of the final module control at the Department of Clinical Pharmacology and Pharmacotherapy in Ivano-Frankivsk National Medical University aims at the development of the of clinical reasoning skills, solving the individual drug therapy problems, drug interactions among themselves and with food, ways of polypragmasy elimination, reduce in the risk of adverse reactions, communicative skills of future doctors. The methodology of module control was illustrated, types of theoretical and practical knowledge control were analyzed, peculiarities of students assessment were shown.

Keywords: credit-modular system; clinical pharmacology; final module control.

Introduction

The inclusion of Ukraine into European education and research area promotes modernization of the educational activities in the context of the Bologna Process. It is the introduction of credit-modular system of educational process that optimizes students' mastering of clinical thinking, exemplifies and concentrates the necessary information, regulates the importance of each discipline [1, 3]. Students acquire basic professional knowledge according to the curriculum, namely through lectures, practical classes and independent work. Teachers' consultations have a significant value in their organization. In the courseware a tendency to the reduction of class hours and increase in the hours of independent work (up to 60 % of study time) was notice in the curriculum [2, 4, 5].

The objective of this article was to study the features of the final module control (FMC) in Clinical Pharmacology in the context of the goals, content and tasks of the subject mastering. Publications relating to the conduction of FMC in Clinical Pharmacology have not been found in the available literature.

Main part

Clinical Pharmacology as a subject aims at training the professionals who have a sufficient scope of theoretical knowledge and practical skills to conduct the most rational drug therapy in individual patients, who know how to select the most effective and safe medicines and their combinations taking into account the body peculiarities, the course and form of the disease, comorbidity according to the evidence-based medicine data. The study of Clinical Pharmacology occurs in the IX term of the fifth year of the Medical Faculty. The discipline program is structured for 1 module including 3 blocks of theme modules, 8 topics for practical classes according to the requirements of "Recommendations for the Development of Academic Discipline Curriculum" (the order of the Ministry of Health of Ukraine №492 from 12.10.2004).

Final module control is testing of students' knowledge and skills after studying one or more units of the discipline. FMC allows to evaluate the integrity and quality of mastering the large quantity of educational material as the control of students' knowledge and skills is an integral part of educational process. It suggests the study effectiveness, the level of practical skills formation and theoretical knowledge mastering, students' understanding of the educational process. Students' assessment should be based on one factor, namely knowledge acquired in the process of education.

Final module control is conducted on completion of the module study. Students who have completed all types of work provided by the curriculum and have got the points not less than minimum during the module study (56 points) have permission to pass final module control. The form of FMC is standard and includes the control of theoretical and practical training.

Final module control has three stages and lasts 4 academic hours.

At the Department of Clinical Pharmacology and Pharmacotherapy, according to the recommendations of central methodic committee, FMC includes various forms of knowledge checking: testing, oral theoretical survey based on the learnt material and analysis of practical skills.

The use of test control enables the elimination of the conventional survey disadvantages, namely subjectivity or bias. The contents of tests correspond to modern medical knowledge and are based on the principles of evidence-based medicine. Test results can be used to assess both students' knowledge and the quality of the educational process. Tests results evaluation is conducted according to the number of received correct answers. The level of 75% is considered to be the lower limit of the right answers. If the students successfully pass this limit, they get permission for the following stage of FMC, namely checking of theoretical knowledge on the basis of the studied material. Oral survey allows to assess students' line of thinking, to identify the ability of clinical thinking, as the test control has one drawback, namely the inability to determine whether the student's correct answer is the result of knowledge or random guessing.

The next stage the students have to pass is the assessment of practical skills acquired in the course of Clinical Pharmacology study. The students defend "Protocol of Drug Efficacy and Safety". The student gets two marks for "Protocol of Drug Efficacy and Safety". One mark is for the written part, another one – for its defending. Both marks affect the total number of points for the final module control in Clinical Pharmacology. In the process of writing and defending the "Protocol..." the student shows acquired practical skills of the discipline according to educational and professional program (EPP) and course description (CD). The student must know how to choose the necessary medicines, adequate drug form and dosage regimen when prescribing the drug to patients with major pathological syndromes; to define the main methods of patients' clinical examination in order to assess the effectiveness and safety of drugs prescription and to analyze their results; to use basic pharmacokinetic parameters to prescribe drugs rationally; to interpret and take into account in the clinical practice the peculiarities of clinical pharmacokinetics, pharmacodynamics, side effects and interactions of main drugs groups; to predict the consequences of drug interactions in cases of the combined use and to be skilled in prevention and correction of drugs adverse effects; to interview patients for medical history and to predict potential complications of pharmacotherapy. This task introduces some creativity to the process of FMC, as students may independently make important decisions about diagnosis and pharmacotherapy of disease and comorbidities. It also lays some foundations in the medical practice of a future doctor.

On the basis of three stages of FMC (tests, theoretical and practical parts) the number of points is totaled and a question is decided whether to consider the discipline passed. The maximum number of points at the FMC is 80. Final module control is considered passed if the student gets at least 50 points.

Conclusions

1. Final module control Clinical Pharmacology meets the requirements of the Bologna process.
2. Writing and defending "Protocol of Drug Efficacy and Safety" improves active perception of educational material during practical classes, helps to deepen and consolidate the acquired knowledge, develops analytical and systematic approach to issues of Clinical Pharmacology, realizes the ultimate goals of the discipline study.

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