

training the integration of the programs SOCRATES, LEONARDO DA VINCI, TEMPUS III has been offered. The new integrated program includes: a comprehensive program of mobility and cooperation in education for the EC member-states, the European Economic Area member-countries / European Free Trade Association (EEA / EFTA) and candidate countries as long as life endures, including both higher education and professional training of other levels; the new program TEMPUS PLUS for the cooperation between the countries bordering the EC and participating in the program TEMPUS devoted to education and professional development; the program ERASMUS MUNDUS. The comprehensive program for lifelong learning has been essentially enhanced in the part of decentralized actions and is aimed at the support of individual mobility of people and partnership between organizations. Its tasks include: the participation of not less than 10% of school children and teachers in the program COMENIUS for the period of 2007-2013; the participation of not less than 3 million students in the program ERASMUS by 2010; not less than 150 thousand listeners to qualification programs per year up to 2013; not less than 50 thousand adults taught and teaching abroad per year up to 2013. As one can see – the figures are impressive. Which will be Russia's part in these figures? Two cornerstones of education – language knowledge and financial problems, as always, will be in the path of “individual mobility of people and partnership between organizations”.

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#### **PROBLEM-BASED METHODOLOGY- LEARNING OF PHARMACEUTICAL EDUCATION**

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An important role in the international integration of national educational standards in Russia is played by the international projects coordinating the efforts of various nations in solution of global problems of health care, the concepts determining the strategy and tactics of the nations' health care systems perfection. The “Rational pharmaceutical management” and the concept of “Rational use of medicaments” should be referred to such projects. Their realization in Russia has changed the native health care national policy essentially, presented new requirements to the professionalism of all levels specialists working in the area of medicine and pharmacy. It

couldn't help affecting the medical and pharmaceutical education in Russia.

A certain influence on the integration of medical and pharmaceutical education has had the activity of the European regional Bureau of the World Health Organization. On its initiative the international seminar “Implementation of Rational Medication into Academic Programs of Medical Higher Educational Institutions of the CIS” (Russia, Moscow, May 21-23, 1997) was held and the internship of the Russian medical and pharmaceutical HEI faculties in the international courses “Teaching Rational Medicinal Treatment for Medical HEI students (Netherlands, Groningen, August 21-29, 1997). A major landmark in the international integration of national educational standards has become the “International Conference on the pharmaceutical education strategy in Europe” organized within the framework of the program of cooperation between the Ministry of Health Care and Social Development of the Russian Federation and European Regional Bureau of the World Health Organization (Russia, Moscow, October 11-12, 2005).

The rational use of medications – is the carrying out of medicinal treatment adequate to the clinical state of the patient in the dosage corresponding to his individual features for a proper time period and to the keenest price. The analysis of the “Rational use of medicaments” concept testifies that there is much in common in the integration of medical and pharmaceutical education. In accord with current trends of medical and pharmaceutical help development from the position of evidence based medicine both the doctor and the pharmacist focus their professionalism on the patient, they solving the patient's problems by means of medicaments. It is the patient's problems that are the motivation of the professional communication of the doctor and the pharmacist, the competence of who will be determined by the knowledge and skills level acquired while studying at a basic and pharmacology HEI.

Present-day achievements of science and practice testify to the impetuous expansion rate of the extent of knowledge on pharmacological disciplines, rapid development of the pharmaceutical market and ever-increasing part of principally new medicaments. There is hardly a dare-devil, who will dare to maintain that the decades existing educational system meets modern trends of medicine and pharmacy development. The education basing on facts cognition is becoming unreasonable. The medical and pharmaceutical education reforming expediency emerges objectively.

The main principles of medical and pharmaceutical education reforming become the international community statements, one of which is that “the pharmacist occupied in a retail drugstore – is not a seller, but, first of all, a bearer of specialized knowledge, advisor of the doctor and patient” (WHO, GPP rules). Thus, the knowledge and skills level on phar-

macological disciplines in a pharmacist cannot be lower than that in a doctor.

The pharmaceutical education reforming supposes the modernization of education programs, the keystones of which are:

- the correspondence to present-day practice of rational use of medicaments;
- the correspondence to the knowledge level, national health care problems;
- the teaching of problem solving skills (which do not depreciate in the course of time);
- the use of preparations, included into the national instruction for medicaments use, as the basis for pharmacists;

In spite of the fact that all these principles were put across pharmacologists and clinical pharmacologists in 1997 already at the international seminar in Moscow (1997), unfortunately, the program on pharmacology, which pharmaceutical HEIs follow, has not been modernized and doesn't meet the international integration principles. The same problems in teaching clinical pharmacology/medicinal treatment (the Problem Committee Chairman is the Academician of RAMS Kukes V.G.) are being solved more progressively.

One of the key regulations for the rational use of medicaments is teaching pharmaceutical HEI students medicinal treatment by means of problem-based method. The HEI faculties of Moscow, Smolensk, Ryazan, Kazan and Perm have passed the internship at the Gronningen University under the auspices of the European Regional Bureau of the World Health Organization. This method has been used for 10 years at the Pharmacology Department of the Perm Pharmaceutical Academy.

The introduction of rational medications use practice into the pharmaceutical education in Perm took place in a stepwise manner. Originally it included:

- the organization and holding an interuniversity seminar for teachers on the rational medications use methodology;
- the modernization of clinical pharmacology/medicinal treatment education program;
- the development and publishing a rational medications use principles-based study guide for pharmaceutical HEI students;
- the development and publishing a clinical pharmacology/medicinal treatment study guide containing tests and problem-based assignments for pharmaceutical HEI students. The purpose of the study guide is to promote the acquisition of skills of rational medications choice at various diseases on the efficiency and safety criteria, carrying out the pharmacoeconomic analysis of advantages of a series of medicaments over the other ones, the inclusion of medicaments into logbooks of various levels, the by-

effects monitoring and forecasting, the exercise of competent consultation of the preparations consumers;

- the organization of problem-based learning method training for the Pharmacology/Clinical Pharmacology Department faculty instructors;
- the organization and development of rational medications use research, holding conferences, symposia of regional and federal levels;
- the organization and carrying out the knowledge and skills quality control of rational use of medications included into the federal formulary system in students.

At the following stage the practice of rational medications use is introduced into qualified pharmaceutical chemists' education at the extramural department, internship and the department of postgraduate professional pharmaceutical education. It should be noted that the academic process correction touched mainly the material volumes that is connected with the difference in hours. The objectives and teaching methods are identical to those defined at the intramural form of pharmaceutical education.

The experience of rational medications use concept introduction into the academic process of the Perm Pharmaceutical Academy was reported in panel sessions of the Russian Problem Educational Methodological Committee on clinical pharmacology, the International Conference on the pharmaceutical education in Europe (Moscow, 2005).

Our experience has showed that the international integration of national educational standards opens manifold possibilities for the introduction of new educational technologies, leads the pharmaceutical education quality to a principally new level, raises the prestigious value of the profession, guarantees its socially significant and economically effective realization.

The constraint of the international integration of national educational standards, in our opinion, is the teaching staff, as it is little informed about the processes taking place within the training system of high qualification cadres, and therefore, not all its representatives are ready for the pharmaceutical education modernization.

It is advisable to ease the availability of information about the features of national educational standards, new technologies of education for the teachers' body, to make the educational internet-resources free. All this will allow understanding the essence of the education reforming, entering actively the processes of educational standards' and technologies' international integration.

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*Materials of conferences***PROSPECTIVES OF THE POWER SECTOR REFORMATION**

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Over the last decades there were many debates about suitability and reconstruction ways of those sectors of national economy which in some ways have signs of natural monopoly. A similar situation is taking place in Russia; a special attention is paid on power industry reformation – a classical model of natural monopoly.

At the present time the power grid is a rod of Russian power sector, which involves a complex of economic relations, occurred at the production process (including complex production of power and heat energy), power energy transmission, operative-dispatch management at electric power engineering, distribution and usage of power energy.

Russian power complex is an engine of the country's development. Not only future of the power sector directly depends on its reformation results but also Russian economy prospects in whole – the place and the role on the world arena.

The main aim of the power sector reconstruction is to form market relations at power industry. It's specified by the fact that Russian power sector directly and seriously depends on governmental and political institutions and large private conglomerates, it means that power sector is a vertically integrated monopoly with a public form of ownership. According to many experts opinion, monopolistic structure saving at Russian power industry encourages ineffective funds and natural recourses usage that finally affects not only price for the provided service but also quality decrease and leads to consumption rights infringement.

Competitive conditions, created during reform, will let to optimize Russian power grid work and raise efficiency of generating capacity charging. It's connected with the fact that separation of the present monopoly into independent companies, according to the activity kinds will let to consolidate uncoordinated assets management; it will raise managing ability of the new power sector subjects (operating companies), simplify realization of the single development strategy and involve considerable financial resources. In addition, competitive market creation will raise investment attraction of the network infrastructure; it will create additional abilities for power energy transmission and extend its volume. Due to this, geography of the power energy trade will expand and become more sophisticated, including Export-Import operations. As a result, development of energy-saving technology and energy consumption schemes will be stimulated; it will considerably reduce power inputs per unit of a generated item. The reform will also let to solve the

problem of consumers powering reliability, eliminate local electric energy deficiencies which are typical for many Russian regions. Eventually, injected into sectors competitions will let to stabilize prices for electric energy at acceptable level and give new abilities for a schedule and purchases' value optimization as well as risk compensation.

It's obvious that power industry reformation will change sector's structure. New principles and mechanism of control and development of the power industry at the modern market economy should be developed as well as market criterion of estimation of the reform efficiency.

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**EFFICIENCY OF ENTERPRISES' BUSINESS PROCESSES AS PART OF MULTI-INDUSTRY INTEGRATED STRUCTURES IN TERMS OF INNOVATIONS DEVELOPMENT**

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The world's experience shows that the stable economical growth and the gross domestic product increase are possible only on the innovative basis with active use of modern scientific and technological achievements and on the ability to innovative activities and introductions.

In present-day competitive activity the struggle for the ability to innovative introductions and not for the resource and material values possession takes place.

This problem is especially burning for our country, which is in the period of transition to market relations. Nowadays, for the majority of industrial organizations the adaptability to quickly changing economical and political situation is a pressing task.

In connection with this the choice of the enterprise's most effective innovative activities management instrumentation, the innovation potential estimation and the ways of innovation activity promotion development emerge. It will allow providing the competitive edge of the enterprise, defining the innovative activities' internal possibilities swiftly, detecting hidden reserves of the organization's development for the purpose of its commercial activity's efficiency upgrading.

The innovative activity's and its results' high level at the industrial organizations of developed countries is conditioned, to a large extent, by the availability and constant development of the complex of multi-industry relations formed on the one hand –