## THE ACTUALITY OF PRACTICE IN CLINICAL PHARMACY IN CONDITIONS OF HEALTHCARE SYSTEM REFORMATION IN UKRAINE

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The actuality. In the modern healthcare system there is a trend of the growing number of non-prescription medicines (i.e. OTC – over the counter) as well as expanding the role of a pharmacist with regards to providing additional services. This condition fundamentally changes the role of a pharmacist in the healthcare system. Thus the main goal of his professional activity now focuses not only on increasing quantity and quality of medicines at the market but also enhancing the effectiveness and safety of a patient therapy, providing pharmaceutical care to each pharmacy visitor and introduction of "additional pharmaceutical services", i.e. performing primary laboratory screenings, participation in social programs on prevention of HIV, drug abuse etc.

**Statement of the main material.** Clinical pharmacy is a theoretical base for consultations regarding the broad range of issues related to the rational use of medicines as well as providing pharmaceutical care to visitors. Manufacturing practice is an important component of clinical pharmacy learning. It covers the algorithm of pharmaceutical care delivering during the dispense of non-prescription medicines and medicines by physician's prescriptions, consultative work in a pharmacy as well as efforts on prevention and monitoring of possible adverse reactions of medicines.

Manufacturing practice in clinical pharmacy takes place at a pharmacy and is scheduled at the 5<sup>th</sup> course (9<sup>th</sup> semester), the duration is 2 weeks long (10 working days during the five-day workweek).

The key tasks of the manufacturing practice in clinical pharmacy are:

- acquiring the skills of pharmaceutical care dispensing OTC-drugs;
- gaining the skills of defining conditions of the rational use of prescription medicines;
- consultation on medicines interactions with meal, alcohol, other medicines, dosage regime, the appropriate use of a particular dosage form;
- practicing the individual approach to each patient considering the age factor as well as the severity of a disease based on medical ethics and deontology principles.

The manufacturing practice in clinical pharmacy should result in the following outcome professional competencies:

- monitoring effectiveness and safety of the medicines use among population according to the clinical and pharmaceutical properties as well as subjective characteristics and objective clinical, laboratory and instrumental criteria of a patient's examination;
- assuring the rational use of prescription and non-prescription medicines considering physical and chemical, pharmacological properties, biochemical, pathophysiological characteristics of a patient;
- helping to acquire skills of the use of drugs that require specific methods of administration (e.g. inhaled medicines);
- providing first aid to patients and injured in emergencies;
- consultations and pharmaceutical care during the choosing and dispensing non-prescription medicines based on the evaluation of risk/benefit ratio, compatibility, indications and contradictions, consideration of the data about a patient's state of health, as well as biopharmaceutical, pharmacokinetic, pharmacodynamic, physical and chemical properties of a medicine;

 public information and education with the purpose of prevention of high prevalence diseases, infection and parasitic diseases as well as their timely diagnosing and assuring treatment compliance according to its medical and biological as well as microbiological characteristics.

At the end of the practice students who completed all types of work required by the training program, were assigned minimal grades for the learning activities and presented practice materials (the report on the practice and the practice diary) are allowed to pass the final module control.

The final module control includes the oral examination of the practical skills which have been achieved: a competence on defining whether a patient requires to be referred to a physician or to be administered an OTC-drug under the responsible self-treatment concept; to deliver pharmaceutical care while dispensing non-prescription medicines; to determine the conditions of the rational use of drugs; to provide consultations regarding drugs interactions with meal, alcohol and other medicines, dosage regime, the use of a particular dosage form; to deliver pharmaceutical care to pregnant women.

All these skills students acquire during the manufacturing practice in clinical pharmacy which takes place "near the counter" i.e. at the working place of a pharmacist. During the practice students learn to apply the algorithm of identifying patients who need to be referred to a physician and those who do not need this; to choose the best non-prescription medicines in a particular case, to determine the rational routes of administration and the dosage regimes for patients with different diseases. At the same time, students improve their skills in collecting medical history, allergy-focused medical history, analysis of receipts and its revising. Students have the opportunity to get the first experience of direct communication with a patient or his family members and, if necessary, with a physician; acquire expertise in improving patient compliance with regards to the prescribed therapy. Also, they learn to provide pharmaceutical care to particular categories of patients (elderly, children, pregnant women, etc) which need increased attention of a pharmacist.

**Conclusions.** The experience of manufacturing practice shows that such a practice assures a high quality of modern training of a pharmacist who should be a connecting link between a physician and a patient.

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