

Clinical pharmacology
Academic year 2012/2013
Faculty of Dentistry, Wrocław Medical University.

General informations:

<i>Name of the module/ course</i>	Clinical Pharmacology		
<i>Year of study</i>	V	<i>Semester</i>	IX
<i>ECTS</i>	0,5		
<i>Number of hours</i>	30		
<i>Examination form</i>	Average ratings of the semester seminar classes		
<i>Teachers</i>	MSc Irena Duś		
<i>The person responsible for the subject</i>	Dr hab. Małgorzata Radwan-Oczko, prof.nadzw.		

Specific informations:

Objectives of the course:	
1	Acquisition of knowledge about the object being Pharmacology, learning the basic tasks of a dentist in clinical pharmacology.
2	Development of the ability to analyze information on the drugs used in dental practice contained in the The European Pharmacopoeia (one from available in the library 5 th 6 th 7 th edition of The European Pharmacopoeia), and the leaflet attached to the drug. Development of pharmacological treatment planning capacity or adjunctive therapy in dental practice using the knowledge in the field of Clinical Pharmacology.
3	Awareness of the role of Clinical Pharmacology in dental practice. Education awareness of the use of the drug cards, drug leaflet, as well as the significance of the task posed to a dentist in his private practice in relation to the proper use of the drug and reporting any drug adverse reactions to the competent authority.

During the course, students will take an active part in interactive lectures and lectures presented by leading feed. All (15) meetings, each participant of the seminar will describe the project selected by him/her from a list provided by the teacher. The presentation should take maximum 15 minutes and should be focusing on the most relevant information about the process/drug selected (f.eg. for a drug: the drug release from the dosage form, administration of the drug, its metabolism, and removing from the body.) Any information required are available in the The European Pharmacopoeia, about any informations needed please contact teacher in e-mail provided the bottom of the 5th page.

It is planned a group trip to the Regional Centre of the Pharmacovigilance in Wrocław, which is located at the Department of Clinical Pharmacology, Faculty of Pharmacy, Wrocław Medical University, in order to familiarize students with the characteristics of the research and work carried out at the resort.

Number of classes	Description of the classes	Number of hours	Basis for evaluation of class activity of student	Effects of the class	Number of training effect in accordance with the standards of education for Stomatology.
1.	<p>The first part of the classes: Introduction to Clinical Pharmacology course. Description of activities, forms of student's activity during class assessment, an introduction to Clinical Pharmacology classes during the winter semester, establishment of organizational matters.</p> <p>The second part of the classes: Interactive lecture. Concepts and methods used in clinical pharmacology and the fate of the description of the pattern of drug in the body.</p>	2	Organisation of classes.	Introduction to the theme of the course, the objectives and material to be obligatory during the classes.	C.W18
2.	<p>The first part of class: Individual project of students. Interactive presentations (in power point program) of the selected drug or process. Discussion about the presentation.</p> <p>The second part of the classes: Interactive lecture. Drug interactions, drug interaction implications.</p>	2	Evaluation of the presentation presented by the student, and participating in the lecture.	Sensitizing students to multitude of drugs' interactions and its impact on effect of the treatment and the patient's health.	C.W19.
3.	<p>The first part of the classes: Individual project of students. Interactive presentations (in power point program) of the selected drug or process. Discussion about the presentation.</p> <p>The second part of the classes: Interactive lecture. Factors determining the adverse effects of drugs, organ damage and organ dysfunction of the body. Methods of prevention and monitoring of adverse drug reactions.</p>	2	Evaluation of the presentation presented by the student, and participating in the lecture.	Students' awareness of dentists' role in adverse drug reactions monitoring.	
4.	<p>The first part of the classes: Individual project of students. Interactive presentations (in power point program) of the selected drug or process. Discussion about the presentation.</p> <p>The second part of the classes: Lecture. Determination of drug</p>	2	Evaluation of the presentation presented by the student, and participating in the lecture.	Training of the ability to recognize drugs influence on the false positive and false negative results of laboratory tests.	C.W16., E.U4.

	influence on the patient's laboratory results.				
5.	<p>The first part of the classes: Individual project of students. Interactive presentations (in power point program) of the selected drug or process. Discussion about the presentation.</p> <p>The second part of the classes: Lecture. Changes of drug action in relation to the patient's pathological condition.</p>	2	Evaluation of the presentation presented by the student, and participating in the lecture.	Ability training of dose modifications and optimal dose implementation of medication in the patient's pathological states, patient of the dental surgery.	E.W1.
6.	<p>The first part of class: Individual project of students. Interactive presentations (in power point program) of the selected drug or process. Discussion about the presentation.</p> <p>The second of the classes: Lecture. Diversity of age and physiological condition of the patient, and its influence to the use of medication, due to the pharmacotherapy of newborns, pregnant women and nursing mothers, or the elderly.</p>	2	Evaluation of the presentation presented by the student, and participating in the lecture.	Awareness of physiological condition influence and age of the patient to change the pharmacokinetics of the drug.	E.W12.
7.	<p>The first of the classes: Individual project of students. Interactive presentations (in power point program) of the selected drug or process. Discussion about the presentation.</p> <p>The second of the classes: Interactive lecture. Pharmacogenetics and pharmacogenomics - what and for whom? Introduction to the classes of clinical trials.</p>	2	Evaluation of the presentation presented by the student, and participating in the lecture.	Knowledge of the influence of pharmacogenetics on the development into research of new drugs, as well as the optimization of drug dosing.	B.W18.
8.	<p>The first part of the classes: Individual project of students. Interactive presentations (in power point program) of the selected drug or process. Discussion about the presentation.</p> <p>The second part of the classes: Interactive lecture. Evidence Based Medicine, EBM, <i>Good Clinical Practice</i>, GCP.</p>	2	Evaluation of the presentation presented by the student, and participating in the lecture.	Knowledge of the methodology of preclinical and clinical studies based on the principles of EBM and the applicable law regulations.	
9.	Outdoor classes - a trip to the Regional Centre of the Pharmacovigilance in Wrocław.	2	Presence and active participation in the trip.	The ability to report drug interactions and adverse drug reactions to the Regional or Central Centre for Monitoring Adverse Drug Administration or the	

				National Action.	
10.	Pharmacoeconomics and social pharmacology: Comparative seminar.	2	Evaluation of students' participation in lecture.		
11.	Perioperative antibiotic prophylaxis: ♦ basic principles of antibiotic prophylaxis according to Peterson (1990r.) ♦ surgical division due to risk of postoperative infections (Ehrenkranz, 1993) Subdivision of disinfectants in dentistry (organic and inorganic).	2	Evaluation of students' participation in lecture.	Wprowadzenie studentów w problematykę doboru odpowiednich substancji odkażających w stomatologii oraz okołoperacyjnej profilaktyki antybiotykowej.	C.W20.
12.	The role of the dentist in the dental care of patients with cancer. Pharmacological treatment in patients treated with anticoagulant.	2	Evaluation of students' participation in lecture.	Awareness of the role of the dentist in the care of patients with cancer and treated with anticoagulant.	D.U3.
13.	Treatment of dental pain: acute pain, chronic pain, pain medication interactions. Local anesthetics, complications that may accompany a local anesthetic.	2	Evaluation of students' participation in lecture.	Training of the ability to determine safe pharmacotherapy in the prevention of pain in dentistry.	C.W21.
14.	Drug allergies and its treatment. Allergic symptoms in the oral cavity for the substances used in dentistry, drug side effects in the oral cavity. Pharmacological treatment of patients with bleeding after extracyion. Errors in medication of stomatognathic disorders.	2	Evaluation of students' participation in lecture.	The ability to distinguish drug-induced allergy in dental patients, and sensitivity to errors in medication given during stomatognathic disorders.	
15.	Summary of students' work during the course of Clinical Pharmacology.	2	Evaluation of students' participation in the whole course of Clinical Pharmacology.		

Literature:

Basic & Clinical Pharmacology, Katzung BG, Mc Graw Hill, 10th Ed, 2007

Goodman & Gilman's, The Pharmacological Basis of Therapeutics. L Brunton, J Lazo, IBuxton, D Blumenthal, McGraw-Hill, 11th Ed, 2006

Teaching methods and tools:

- Lecture: interactive presentations, and talks.
- Project: 15-minute power point presentation about drug/process selected from the list provided by a teacher.

Method of evaluation:

F1: evaluation of the activity in the classroom,

F2: evaluation for participating in the discussion presented a presentation,

F3: self-assessment for the project for a description of the drug,

P1: a weighted average given for the end of the class, forming calculated ratings (F1, F2, [...])

Criteria of evaluation

Form of assessment	2	3	3,5	4	4,5	5
Participiom	More than 2 missed classes	Possibility of 1 missed class (presence in 94% of classes)	Possibility of 1 missed class (94% of classes)	Possibility of 1 missed class (presence in 94% of classes)	Possibility of 1 missed class (presence in 94% of classes)	100% of classes, or less when the medical justification is provided
Presentation in power point about the drug or pharmacological process	None presentation done during whole course	One presentation done during the whole course	One presentation done during the whole course	One presentation done during the whole course	One presentation done during the whole course	Two presentations done during the whole course
Votes	Summary of score achieved during classes is less than 3.	Summary of score achieved during classes gives 3 as a vote.	Summary of score achieved during classes gives 3,5 as a vote.	Summary of score achieved during classes gives 4 as a vote.	Summary of score achieved during classes gives 4,5 as a vote.	Summary of score achieved during classes gives 5 as a vote.
Activity during classes	Student doesn't show any interest in the subject, doesn't participate in conversations and doesn't come to the trip to the Regional Centre of the Pharmacovigilance in Wroclaw.	Student shows low interest in the subject, participates in conversations.	Student shows interest in the subject, participates in conversations.	Student shows interest in the subject, participates in conversations.	Student shows great interest in the subject, participates in conversations.	Student shows great interest in the subject, participates in conversations.

Teacher (name, surname, e-mail)

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