

Study program: Integrated Academic Studies in Medicine			
Course title: Rational Drug Use in Pregnancy and Lactation			
Teacher: Aleksandar L. Rašković, Olga J. Horvat, Saša N. Vukmirović, Boris T. Milijašević, Vesna M. Mijatović Jovin, Nebojša P. Stilinović			
Course status: elective			
ECTS Credits: 3			
Condition: -			
Course aim The aim of this course is to provide students with knowledge on basic principles of pharmacotherapy during pregnancy and lactation.			
Expected outcome of the course Students learn about basic characteristics of drugs used in pregnancy and lactation, with particular reference to the safety of pharmacotherapy; students learn about drugs which proved reasonable for use during pregnancy and breastfeeding based on the principles of evidence based medicine. At the end of the course students are expected to master basic skills and principles of rational pharmacotherapy in pregnant women and nursing mothers.			
Course description <i>Theoretical education</i> Selection of drugs in relation to the sex of patient. Physiological characteristics of a pregnant woman and fetus affecting pharmacokinetic and pharmacodynamic properties of drugs. Physiological characteristics of nursing mothers and newborns/infants affecting properties of drugs during lactation. Criteria used to assess the risks and safety of drugs during pregnancy and breastfeeding. Classification of drugs in regard to their safety during pregnancy and breastfeeding. Impact of drugs on organogenesis, fetus and course of pregnancy. Impact of gestational age of the fetus on characteristics of drugs. Biological markers that indicate the exposure to drugs during pregnancy. Clinical studies in pregnant women. Safety of antihypertensive drugs in pregnancy and lactation. Safety of antiemetics in pregnancy and breastfeeding. Safety of antimicrobial agents during pregnancy and lactation. Safety of drugs used in the treatment of neuropsychiatric disorders (anxiolytics, antidepressants, antipsychotics and antiepileptics) during pregnancy and lactation. Prophylactic use of drugs in pregnancy. Rational pharmacotherapy of pain in pregnancy. Rational use of tocolytics and uterotonics. Impact of tobacco smoke, alcohol and drug abuse on the fetus and pregnancy. <i>Practical education</i> Data sources on the safety of medications used in pregnancy and lactation. Analysis of preclinical study results relevant for drug safety assessment during pregnancy and breastfeeding. Analysis of clinical study results important for drug safety assessment during pregnancy and breastfeeding. Case reports – on application of medications during pregnancy and breastfeeding. Students' essays.			
Literature <i>Compulsory</i> 1. Rang HP, Dale MM, Ritter JM, Moore PK. Pharmacology. New York: Churchill Livingstone; 2003. 2. Bennet PN, Brown MJ. Clinical Pharmacology (11 th ed). London: Churchill Livingstone; 2012.			
Number of active classes		Theoretical classes: 15	Practical classes: 30
Teaching methods Theoretical and practical			
Student activity assessment (maximally 100 points)			
Pre-exam activities	points	Final exam	points
Lectures	5	Written	
Practices	5	Oral	50
Colloquium	-	
Essay	40		