

## Introduction to perinatal medicine

### Online learning course outline

Medicines in Pregnancy			
Topics	Presenter	Learning objectives	Competency standards*
<b>Assessing safety of medication during pregnancy (reproductive toxicology)</b>	<b>Kate Luttrell</b> , <i>Clinical Pharmacist, Royal Hobart Hospital, Hobart, Tas</i>	<ul style="list-style-type: none"> <li>Describe fundamental principles for evaluating the safety of medications in pregnancy</li> <li>Outline critical periods in pregnancy where medicines have the potential to affect human development</li> <li>Describe potential fetal effects of maternal and paternal drug exposure during pregnancy</li> <li>Outline limitations associated with classification systems used to guide medication use in pregnancy</li> <li>Identify key resources for supporting evidence-based decisions on medication use in pregnancy</li> </ul>	3.1.2, 3.2.3, 3.3.1, 3.3.2, 3.5.2
<b>Clinical Pharmacokinetic changes in pregnancy</b>	<b>Elizabeth Heiner</b> , <i>MotherSafe Teratology Information Counsellor, Royal Hospital for Women; Clinical Pharmacist, Children's Hospital at Westmead, Sydney, NSW</i>	<ul style="list-style-type: none"> <li>Describe the physiological changes that occur during pregnancy</li> <li>Discuss the impact pregnancy can have on the pharmacokinetics of medications in general</li> <li>Identify medications that may require dosage adjustments during pregnancy</li> </ul>	3.1.2, 3.2.3, 3.3.1, 3.3.2
<b>Management of unique pregnancy conditions</b>	<b>James Dwyer</b> , <i>Director of Pharmacy, Mercy Hospital for Women, Melbourne, Vic</i>	<ul style="list-style-type: none"> <li>Describe the pathophysiology and clinical management of common complications of pregnancy including hyperemesis gravidarum, gestational diabetes, and hypertensive disorders (including gestational hypertension, pre-eclampsia, HELLP syndrome)</li> </ul>	3.1.2, 3.2.3, 3.3.1, 3.3.2
<b>Guided case study</b>	<b>Elizabeth Heiner</b> , <i>MotherSafe Teratology Information Counsellor, Royal Hospital for Women; Clinical Pharmacist, Children's Hospital at Westmead, Sydney, NSW</i>	<ul style="list-style-type: none"> <li>Interpret appropriate evidence-based information resources to formulate recommendations for safe medication use in pregnancy</li> <li>Practice methods to effectively communicate risk with patients</li> </ul>	3.1.2, 3.2.3, 3.2.5, 3.3.1, 3.3.2, 3.5.2

Medicines in Breastfeeding			
<b>Importance of breastfeeding and medications used for stimulating or suppressing lactation</b>	<b>Associate Professor Treasure McGuire,</b> <i>Assistant Director of Pharmacy, Practice &amp; Development, Mater Health, Gold Coast, Qld</i>	<ul style="list-style-type: none"> <li>• Explain the importance of breastfeeding for both mother and baby, and how it influences infant outcomes</li> <li>• Outline current recommendations for breastfeeding in Australia</li> <li>• Identify situations where additional nutritional supplements or fortification may be indicated</li> <li>• Outline medications utilised in practice for stimulation or suppression of lactation</li> </ul>	3.1.2, 3.2.3, 3.3.1, 3.3.2
<b>Principles of medication use during lactation</b>	<b>Tamara Lebedevs,</b> <i>Senior Pharmacist, Women and Newborn Health Service, Subiaco, WA</i>	<ul style="list-style-type: none"> <li>• Describe factors determining medication transfer into breast milk</li> <li>• Evaluate the risk of infant exposure to medications via lactation</li> <li>• Discuss limitations associated with classification systems used to guide medication use in lactation</li> </ul>	3.1.2, 3.2.3, 3.3.1, 3.3.2
<b>Guided case study</b>	<b>Elizabeth Heiner,</b> <i>MotherSafe Teratology Information Counsellor, Royal Hospital for Women; Clinical Pharmacist, Children's Hospital at Westmead, Sydney, NSW</i>	<ul style="list-style-type: none"> <li>• Interpret appropriate evidence-based information resources to formulate recommendations for safe medication use in lactation</li> <li>• Discuss counselling strategies for use in clinical practice</li> </ul>	3.1.2, 3.2.3, 3.2.5, 3.3.1, 3.3.2, 3.5.2
Medicines in Neonates			
<b>Neonatal Pharmacology</b>	<b>Dr Kate O'Hara,</b> <i>Deputy Service Manager - Clinical and Cannabis Information Service, John Hunter Hospital, Newcastle, NSW</i>	<ul style="list-style-type: none"> <li>• Outline key definitions and terminology used in neonatal medicine</li> <li>• Describe physiological differences across the fetal/neonatal period and how they influence pharmacokinetics/pharmacodynamics</li> </ul>	3.1.2, 3.2.3, 3.3.1, 3.3.2
<b>Challenges of medication administration in the neonatal patient</b>	<b>Megan Clark,</b> <i>Pharmacist Team Leader - Maternity &amp; Neonates, Monash Health, Melbourne, Vic</i>	<ul style="list-style-type: none"> <li>• Discuss common challenges as they relate to medication administration in the neonatal period and strategies to overcome them</li> </ul>	3.2.1, 3.2.3

<p><b>Overview of common conditions and medications used in the neonatal patient</b></p>	<p><b>Josephine Wen,</b> <i>Project Officer and Antimicrobial Stewardship Pharmacist, Royal Melbourne Hospital Guidance Group, National Centre for Antimicrobial Stewardship, Melbourne, Vic</i></p>	<ul style="list-style-type: none"> <li>Identify common conditions observed in neonates</li> <li>Describe the role of commonly used medications in the neonatal setting</li> </ul>	<p>3.1.2, 3.2.3</p>
<p><b>Guided case study</b></p>	<p><b>Megan Clark,</b> <i>Pharmacist Team Leader – Maternity &amp; Neonates, Monash Health, Melbourne, Vic</i></p>	<ul style="list-style-type: none"> <li>Interpret appropriate evidence-based information resources to formulate recommendations for safe medication use in neonatal patients</li> <li>Discuss counselling strategies for use in clinical practice</li> </ul>	<p>3.1.2, 3.2.3, 3.2.5, 3.3.1, 3.3.2, 3.5.2</p>
<p><b>Practical Skills</b></p>			
<p><b>Lessons learned from setting up new obstetric pharmacy service</b></p>	<p><b>Megan Clark,</b> <i>Pharmacist Team Leader – Maternity &amp; Neonates, Monash Health, Melbourne, Vic</i></p>	<ul style="list-style-type: none"> <li>Explain how to establish an obstetric pharmacy service</li> </ul>	<p>4.7.6</p>
<p><b>Opportunities for pharmacists in perinatal medicine</b></p>	<p><b>Josephine Wen,</b> <i>Project Officer and Antimicrobial Stewardship Pharmacist, Royal Melbourne Hospital Guidance Group, National Centre for Antimicrobial Stewardship, Melbourne, Vic</i></p>	<ul style="list-style-type: none"> <li>Describe the pharmacist role in optimising medication management during the pregnancy and neonatal period</li> </ul>	<p>1.5.1, 4.6.2</p>
<p><b>A day in the life of a womens and newborn pharmacist</b></p>	<p><b>Josephine Wen,</b> <i>Project Officer and Antimicrobial Stewardship Pharmacist, Royal Melbourne Hospital Guidance Group, National Centre for Antimicrobial Stewardship, Melbourne, Vic</i></p>	<ul style="list-style-type: none"> <li>Discuss the role of a womens' and newborn pharmacist in your practice setting</li> </ul>	<p>1.5.1, 4.7.6</p>