

## Core Module 9: Maternal Medicine

### Learning outcomes:

- To understand and demonstrate appropriate knowledge, skills and attitudes in relation to maternal medicine

Knowledge criteria	GMP	Clinical competency	GMP	Professional skills and attitudes	GMP	Training support	Evidence/assessment
<p>Understand the epidemiology, aetiology, pathophysiology, clinical characteristics, prognostic features and management of:</p> <ul style="list-style-type: none"> <li>▪ hypertension</li> <li>▪ kidney disease</li> <li>▪ heart disease</li> <li>▪ liver disease:</li> <li>▪ circulatory disorders</li> <li>▪ haemoglobinopathies</li> <li>▪ connective tissue diseases</li> <li>▪ disorders of carbohydrate metabolism</li> <li>▪ endocrinopathies</li> <li>▪ gastrointestinal disorders</li> <li>▪ pulmonary diseases</li> <li>▪ connective tissue diseases</li> <li>▪ bone and joint disorders</li> <li>▪ psychiatric disorders</li> <li>▪ infectious diseases</li> <li>▪ neurological diseases</li> </ul> <p>Maternal complications due to pregnancy</p> <p><i>Able to describe the natural history of diseases and illnesses that run a chronic course</i></p> <p><i>Have knowledge of long term management plans for chronic conditions (see Module 2)</i></p>	1,2	<p>Diagnose, investigate and manage, with direct supervision:</p> <ul style="list-style-type: none"> <li>▪ pregnancy-induced hypertension</li> <li>▪ thromboembolism</li> <li>▪ impaired glucose tolerance</li> <li>▪ insulin-dependent diabetes</li> <li>▪ essential hypertension</li> <li>▪ kidney disease</li> <li>▪ liver disease</li> <li>▪ maternal haemoglobinopathy</li> <li>▪ coagulation disorders</li> <li>▪ acute abdominal pain</li> <li>▪ asthma</li> <li>▪ inflammatory bowel disease</li> <li>▪ intercurrent infection</li> <li>▪ psychological disorders</li> <li>▪ infectious disease</li> <li>▪ epilepsy</li> <li>▪ endocrinopathies</li> </ul>	1,2	<p>Have the ability to recognise the normal from abnormal</p> <p>Develop the skills to competently formulate list of differential diagnoses</p> <p>Have the skills to request the relevant investigations to support the differential diagnosis</p> <p>Competently demonstrate the skills to formulate a management plan</p> <p>Have the ability to implement a plan of management and modify if necessary</p> <p>Develop the skills to liaise effectively with colleagues in other disciplines, both clinical and non-clinical</p>	1,2,3	<p>Local and regional Courses</p> <p>Attendance at medical disorders antenatal clinic</p> <p>StratOG.net Maternal Medicine e-tutorials</p> <p>National Institute for Clinical Excellence.</p> <p>Scottish Intercollegiate Guidelines Network website</p> <p>Scottish Health on the Web website</p> <p>British Maternal and Fetal Medicine Society website</p> <p><i>The Obstetrician and Gynaecologist journal</i></p>	<p>Logbook</p> <p>Reflective diary</p> <p>MRCOG</p> <p>Case reports</p> <p>Audit project</p> <p>CbD</p> <p>Mini CEX</p> <p>MRCOG Part Two</p>

## Appendix to Module 9 – Details of Knowledge Criteria

Understand the epidemiology, aetiology, pathophysiology, clinical characteristics, prognostic features and management of:

### Hypertension:

- Definitions
- Aetiological theories
- Organ involvement (mother, fetus)
- Diagnosis
- Drug therapy

### Kidney disease:

- Urinary tract infection
- Pyelonephritis
- Chronic renal disease
- Renal stones
- Transplantation
- Acute renal failure

### Pulmonary diseases:

- Asthma
- Infection including TB
- Embolism
- Aspiration syndrome

### Neurological disorders:

- Epilepsy
- Cerebrovascular disease
- Multiple sclerosis
- Migraine
- Neuropathies
- Myasthenia gravis
- Paraplegia

### Bone and joint disorders:

- Backpain
- Pelvic girdle dysfunction
- Chronic arthritis

### Psychiatric disorders:

- Manic depressive disorders
- Psychoneurosis
- Puerperal disorders (blues, depression)
- Mood disorders
- Schizophrenia

### Heart disease:

- Congenital
- Rheumatic
- Ischaemic
- Cardiomyopathy
- Heart failure

### Liver disease:

- Cholestasis
- Hepatitis
- Acute fatty degeneration
- Gall stones

### Circulatory disorders:

- Coagulation defects
- Thrombocytopenias
- Thromboembolism
- Transfusion
- Replacement of blood constituents
- Varicose veins (legs, vulva, haemorrhoids)

### Haemoglobinopathies

- Anaemia
- Sickle cell disease
- Thalassaemias

### Connective tissue diseases:

- Systemic lupus erythematosus
- Rheumatoid arthritis
- Immunosuppressant drugs

### Disorders of carbohydrate metabolism:

- Diagnosis
- Gestational diabetes
- Type 1 and Type 2 diabetes
- Hazards (maternal, fetal, neonatal)
- Ketoacidosis
- Drugs (insulins, oral hypoglycaemic agents and pregnancy)

- Reaction to pregnancy loss

**Gastrointestinal disorders:**

- Nausea
- Vomiting
- Hyperemesis
- Gastric reflux
- Abdominal pain
- Appendicitis
- Inflammatory bowel disease
- Intestinal obstruction

**Endocrinopathies:**

- Thyroid (diagnosis, assessment, antibodies, therapy, fetal hazards)
- Adrenal (Addison's disease, acute adrenal failure, congenital adrenal hyperplasia, pheochromocytoma)
- Pituitary (prolactinoma, hypopituitarism, diabetes insipidus)

**Infectious diseases:**

- Investigation of pyrexia
- Serological tests
- Principles (prevention, detection, isolation)
- Therapy (prophylaxis, immunization, antibiotics, antiviral agents)
- Acute management of sepsis
- Maternal (preterm premature rupture of membranes, preterm labour, chorioamnionitis, puerperal sepsis, mastitis, urinary tract infection, wound infections, septic shock, malaria, other tropical infections and infestations)
- Fetus and neonate (streptococcus, gonococcus, syphilis, toxoplasma, listeria, haemophilus, chlamydia, mycoplasma, ureaplasma, herpes hominis, rubella, cytomegalovirus, varicella, hepatitis A, hepatitis B, hepatitis C, parvovirus, influenza, human immunodeficiency virus, neonatal sepsis)

**Maternal complications due to pregnancy:**

- Antepartum haemorrhage
- Amniotic fluid embolism
- Sheehan's syndrome



Core Module 9 Logbook	Competence level					
	Basic level		Intermediate level		Advanced level	
	Level 1		Level 2		Level 3	
	Date	Signature	Date	Signature	Date	Signature
Cardiac disease – rheumatic heart disease						
Cardiac disease – ischaemic heart disease						
Cardiac disease – arrhythmia						
Cardiac disease – peripartum cardiomyopathy						
Liver disease – obstetric cholestasis						
Liver disease – acute fatty liver of pregnancy						
Respiratory disease – asthma						
Respiratory disease – TB						
Respiratory disease – acute respiratory distress syndrome						
Gastrointestinal disease – chronic inflammatory bowel disease						
Gastrointestinal disease – gallstones						
Gastrointestinal disease – reflux oesophagitis						
Gastrointestinal disease – hyperemesis gravidarum						

Core Module 9 Logbook	Competence level		Basic level		Intermediate level		Advanced level		Not required	
			<input type="checkbox"/>		<input type="checkbox"/>		<input type="checkbox"/>		<input type="checkbox"/>	
	Level 1		Level 2		Level 3					
	Date	Signature	Date	Signature	Date	Signature				
Gestational diabetes										
Insulin-dependent diabetes-use of sliding scale										
Insulin-dependent diabetes- complications										
Hypothyroidism										
Hyperthyroidism										
Microprolactinoma										
Neurological disease – epilepsy										
Neurological disease – migraine										
Neurological disease – multiple sclerosis										
Neurological disease – Bell's palsy										
Neurological disease – carpal tunnel syndrome										
Systemic lupus erythematosus										
Antiphospholipid syndrome (APLS)										

Core Module 9 Logbook	Competence level					
	Basic level		Intermediate level		Advanced level	
	Level 1		Level 2		Level 3	
	Date	Signature	Date	Signature	Date	Signature
Sickle cell disease & other haemoglobinopathies						
Haemophilia & von Willebrand's disease						
Thrombocytopaenias						
Previous deep vein thrombosis						
Thrombophilias						
Acute DVT						
Pulmonary embolism <span style="float: right;">OM</span>						
Psychiatric disorders – anxiety/depression						
Psychiatric disorders – bipolar affective disorder						
Psychiatric disorders – schizophrenia						
Psychiatric disorders – postnatal depression						
Skin disease – eczema						
Skin disease – polymorphic eruption of pregnancy						

Core Module 9 Logbook	Competence level					
	Basic level <input type="checkbox"/>		Intermediate level <input type="checkbox"/>		Advanced level <input type="checkbox"/>	Not required <input type="checkbox"/>
	Level 1		Level 2		Level 3	
	Date	Signature	Date	Signature	Date	Signature
Non-gynaecological malignancy <b>OM</b>						
HIV						

Training Courses or sessions		
Title	Signature of educational supervisor	Date

Authorisation of signatures (to be completed by the clinical trainers)	
Name of clinical trainer (please print)	Signature of clinical trainer



Authorisation of signatures (to be completed by the clinical trainers)	
Name of clinical trainer (please print)	Signature of clinical trainer

COMPLETION OF MODULE		
I confirm that all components of the module have been successfully completed:		
Date	Name of educational supervisor	Signature of educational supervisor