# MATERNAL MEDICINE

# **Learning outcomes:**

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

Knowledge criteria	Clinical competency	Professional skills and attitudes	Training support	Evidence/assessment
■ Understand the epidemiology, aetiology, pathophysiology, clinical characteristics, prognostic features and management of: ■ hypertension ■ kidney disease ■ heart disease ■ liver disease ■ circulatory disorders ■ disorders of carbohydrate metabolism ■ other endocrinopathies ■ gastrointestinal disorders ■ pulmonary diseases ■ connective tissue diseases ■ bone and joint disorders ■ psychiatric disorders ■ psychiatric disorders ■ infectious diseases ■ neurological diseases ■ maternal complications due to pregnancy	<ul> <li>Diagnose, investigate and manage, with direct supervision:</li> <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>	<ul> <li>Have the ability to recognise the normal from the abnormal</li> <li>Develop the skills to competently formulate a list of differential diagnoses</li> <li>Have the skills to request the relevant investigations to support the differential diagnoses</li> <li>Competently demonstrate the skills to formulate a management plan</li> <li>Have the ability to implement a plan of management and modify if necessary</li> <li>Develop the skills to liaise effectively with colleagues in other disciplines, both clinical and nonclinical</li> </ul>	<ul> <li>Local and regional courses</li> <li>Attendance at medical disorders antenatal clinic</li> <li>StratOG.net: Maternal Medicine e-tutorials</li> <li>Useful websites:         <ul> <li>www.nice.org.uk</li> <li>www.rcog.org.uk</li> <li>www.sign.ac.uk</li> <li>www.show.scot.nhs.uk/spcerh</li> <li>www.bmfms.org.uk</li> </ul> </li> </ul>	<ul> <li>Logbook</li> <li>SOE</li> <li>MRCOG Part 2</li> <li>Case reports</li> <li>Audit projects</li> </ul>

# Appendix to Curriculum 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
- Glomerulonephritides
- Nephrotic syndrome
- Tubular necrosis
- Cortical necrosis
- Transplantation

## **Pulmonary diseases:**

- Asthma
- Infection
- Embolism
- Aspiration syndrome

# **Neurological disorders:**

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

## Bone and joint disorders:

- Backache
- Symphyseal separation
- Metabolic bone disease
- Neoplasms (benign and malignant):
- Genital tract
- Breast
- Other

# **Psychiatric disorders:**

- Manic depressive disorders
- Psychoneurosis
- Puerperal disorders (blues, depression)
- Mood disorders
- Schizophrenia
- Reaction to pregnancy loss

#### **Gastrointestinal disorders:**

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

## Appendix to Curriculum Module 9: details of knowledge criteria

# Intestinal obstruction Heart disease:

- Congenital
- Rheumatic
- Ischaemic
- Cardiomyopathy
- Heart failure

#### Liver disease:

- Cholestasis
- Hepatitis
- Acute fatty degeneration

### **Circulatory disorders:**

- Anaemia
- Sickle cell disease
- Thalassaemias
- Coagulation defects
- Thrombocytopenias
- Thromboembolism
- Transfusion
- Replacement of blood constituents
- Varicose veins (legs, vulva, haemorrhoids)

#### **Connective tissue diseases:**

- Systemic lupus erythematosus
- Rheumatoid arthritis
- Immunosupressant drugs

#### Disorders of carbohydrate metabolism:

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

## Other endocrinopathies:

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

#### Infectious diseases:

- Investigation of pyrexia
- Serological tests
- Principles (prevention, detection, isolation)
- Therapy (prophylaxis, immunization, antibiotics, antiviral agents)
- Maternal (preterm prelabour 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 syndrome

Skills	Competence level		Basic training	Intermediate training	Advanced training	Not required
	Observation		Direct supervision		Independent practice	
	Date	Signature of trainer	Date	Signature of trainer	Date	Signature of trainer
Diagnose, investigate and manage with appropriate consultation:						
Chronic hypertension						
Pre eclampsia with HELLP						
Pre eclampsia with renal failure						
Pre eclampsia with severe liver disease						
Pre eclampsia with pulmonary oedema						
Pre eclampsia with eclampsia						
Renal disease – hydronephrosis						
Renal disease – reflux nephropathy						
Renal disease – renal transplantation						
Acute renal failure (not PET)						
Cardiac disease – congenital heart disease						
Cardiac disease – rheumatic heart disease						
Cardiac disease – ischaemic heart disease						
Cardiac disease – artificial heart valve						
Cardiac disease – arrhythmia						
Cardiac disease – peripartum cardiomyopathy						

Skills	Competence level		Basic Intermediate training		Advanced Not required	
	Observation		Direct supervision		Independent practice	
	Date	Signature of trainer	Date	Signature of trainer	Date	Signature of trainer
Liver disease – obstetric cholestasis						
Liver disease – acute fatty liver of pregnancy						
Respiratory disease – asthma						
Respiratory disease – acute respiratory distress syndrome						
Respiratory disease – pneumothorax						
Gastrointestinal disease – ulcerative colitis						
Gastrointestinal disease – irritable bowel disease						
Gastrointestinal disease – reflex oesophagitis						
Gastrointestinal disease – hyperemesis gravidarum						
Diabetes-impaired glucose tolerance						
Insulin-dependent diabetes, no complications						
Insulin-dependent diabetes, complications						
Hypothyrodism						
Hyperthyroidsm						

Skills	Competence level		Basic Intermediate training		Advanced Not required	
	Observation		Direct supervision		Independent practice	
	Date	Signature of trainer	Date	Signature of trainer	Date	Signature of trainer
Microprolactinoma						
Adrenal disease						
Postpartum thyroiditis						
Neurological disease – epilepsy						
Neurological disease – migraine						
Neurological disease – multiple sclerosis						
Neurological disease – previous CVA						
Neurological disease – Bell's palsy						
Neurological disease – carpel tunnel syndrome						
Systemic lupus erythematosis						
Rheumatoid arthritis						
APS, no complications						
APS with complications						
Sickle cell disease & other haemoglobinopathies						
Haemophilia & von Willebrand's disease						
ITP						
Previous deep vein thrombosis						

Skills	Competence level		Basic Intermediate training		Advanced Not required	
	Observation		Direct supervision		Independent practice	
	Date	Signature of trainer	Date	Signature of trainer	Date	Signature of trainer
Thrombophilias						
Acute DVT						
Non massive pulmonary embolism						
Psychiatric disorders – anxiety						
Psychiatric disorders – depression						
Psychiatric disorders – bipolar affective disorder					-	
Psychiatric disorders – schizophrenia						
Psychiatric disorders – postnatal depression						
Substance abuse – alcohol					-	
Substance abuse						
Skin disease – eczema						
Skin disease – psoriasis						
Skin disease – polymorphic eruption of pregnancy						
Skin disease – pemphigoid gestations						
Breast cancer						
HIV						

Authorisation of signatures (to be completed by the clinical trainers)						
Name of clinical trainer (please print)  Signature of			linical trainer			
COMPLETION OF MODULE 9						
I confirm that all components of the module have been successfully completed:						
Date	Name of educational supervisor		Signature of educational supervisor			