

**Learning objectives**

**Endocrine and Reproduction-3 Module**

**Year-5 (MBBS)**

**Total Weeks: 04**

Central Curriculum Committee, Khyber Medical University

Prepared by

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## Themes

S. No	Theme	Topics / region covered	Duration in hours
1	Tall/short stature	Pituitary gland	3
2	Neck swelling and Muscle cramps	Thyroid and parathyroid glands	5
3	Excessive thirst and urination	Endocrine pancreas	8
4	Moon face	Adrenal cortex	4
5	Pregnancy and breast lumps	Pregnancy and breast	20

## General learning outcomes

At the end of this module, the students will be able to:

1. Discuss the clinical conditions resulting in Tall/short stature and its management.
2. Discuss the clinical conditions causing Excessive thirst and Urination and its management.
3. Discuss the clinical conditions resulting in Infertility and its management.
4. Discuss pathophysiology of Pregnancy, its Management and complications.
5. Discuss the development of fetus, its growth and complications.
6. Discuss the pathophysiology of Obstetrics emergencies, its Management and complications.

## Specific Learning Objectives

Subject	Topic	Hours needed	Domain of learning	Learning Objectives <i>At the end of this module, the students of year 4 MBBS will be able to:</i>
Theme-1: Tall / short stature				
Medicine	Anterior pituitary gland	1	Cognitive	Discuss the diagnostic approach and management of a patient with tall stature

	Posterior pituitary gland	1	Cognitive	Discuss the approach consideration of a patient with polydipsia
			Cognitive	Explain the diagnostic approach and treatment of a patient with Diabetes insipidus
Pediatrics	Short stature	1	Cognitive	Discuss the diagnostic approach and management of a child with short stature
<b>Theme-2: Neck swelling and muscle cramps</b>				
Medicine	Thyroid gland disorders	1	Cognitive	Discuss the diagnostic approach, management and complications of a patient with suspected hyperthyroidism
		1	Cognitive	Discuss the diagnostic approach, management and complications of a patient with suspected hypothyroidism
	Parathyroid gland	1	Cognitive	Discuss the diagnostic approach, management and complications of a patient with tetany
			Psychomotor	Take history and perform physical examination of a patient with goitre

			Affective	Counsel a patient with goitre
Surgery	Thyroid nodule	1	Cognitive	Explain the diagnostic approach, management and complications of multinodular goitre
			Cognitive	Explain the diagnostic approach, and management of a patient with solitary thyroid nodule
			Psychomotor	Perform thyroid examination
Pediatrics	Thyroid disorders	1	Cognitive	Explain the neonatal screening for hypothyroidism
			Cognitive	Explain the diagnostic approach and management of a child with suspected Cretinism
			Cognitive	Discuss the complications of Cretinism
			Psychomotor	Take history and perform physical examination of a child with hypothyroidism/cretinism
<b>Theme-3: Excessive thirst and urination</b>				
Medicine	Diabetes Mellitus	1	Cognitive	Explain the diagnostic approach, screening and management of a patient

				with suspected Diabetes Mellitus
		1	Cognitive	Elaborate the pharmacological and non-pharmacological management strategies in the management of type-1 and type-2 DM
		1	Cognitive	Elaborate the acute and chronic complications of DM and their management
		1	Cognitive	Discuss the diagnostic approach, management and complications of hyperglycemic syndromes in Diabetic patients
			Cognitive	Explain the diagnosis, management and complications of a diabetic patient presenting with hypoglycemia
			Psychomotor	Take history and perform physical examination of a patient with Type 2 DM
			Affective	Counsel a newly diagnosed patient with DM
Family medicine	Diabetes mellitus-		Cognitive	Explain the management strategies of a diabetic

	general practice management			patient in general practice including the psychosocial impact of disease on patient and their families
				Describe the strategies for prevention of diabetes mellitus and its complications
				Identify the red-flags in a diabetic patient and appropriately refer to speciality care when required
Surgery	Diabetic foot ulcers	1	Cogitative	Discuss the classification, investigations, management and complications of diabetic foot ulcers
			Psychoomotor	Examine and stage a diabetic foot ulcer
Nephrology	Diabetic nephropathy	1	Cogitative	Explain the pathogenesis, clinical features, complications, short and long-term management of Diabetic Nephropathy
Pediatrics	Type-1 DM	1	Cogitative	Explain the diagnostic approach, screening and management of a Child with suspected Type-1 Diabetes Mellitus

			Psychomotor	Take history and perform physical examination of a patient with Type 2 DM
			Affective	Counsel a newly diagnosed patient and parents with type 1 DM
<b>Theme-3: Moon face and obesity</b>				
Medicine	Cushing`s syndrome	1	Cogitative	Discuss the diagnosis, management and complications of a patient with suspected Cushing`s syndrome
		1	Cogitative	Explain the Dexamethosone suppression test in terms of its indications and interpretation
			Cogitative	Explain the protocol of steroids withdral in a patient with steroids abuse
			Psychomotor	Take history and perform physical examination of a patient with Cushing`s syndrome
	Addison`s disease	1	Cogitative	Discuss the diagnosis, management and complications of a patient with suspected Addison`s disease (both primary and secondary)



			Cognitive	Explain the concept of steroids replacement in terms of its indications and precautions
	Obesity	1	Cognitive	Discuss the etiology, complications, medical and surgical approaches to the management of obesity
			Psychomotor	Take history and perform physical examination of a patient with morbid obesity
			Affective	Counsel a morbidly obese patient regarding the complications and lifestyle management
<b>Theme-5: Pregnancy and breast feeding</b>				
Gynaecology and Obstetrics	Obstetrics history and examination		Psychomotor	Take an obstetric history and perform abdominal, pelvic, and obstetric/gynecological examination of a lady
			Psychomotor	Measure and interpret blood pressure in a pregnant lady
			Psychomotor	Examine the breast of a full term pregnant female
			Psychomotor	Perform urine examination via dipstick technique for pregnancy,

				glucose, urine and bacteria
	Antenatal care	1	Cognitive	Define and explain the aims of antenatal care
			Cognitive	Discuss the components of antenatal care
			Cognitive	Explain different types of screening tests during antenatal care
		1	Cognitive	Discuss the maternal and neonatal complications associated with increased BMI in pregnancy
			Cognitive	Identify high risk women of developing pre-eclampsia, preterm birth, fetal growth restriction, and vitamin D deficiency
			Psychomotor	Perform and record proper antenatal checkups
			Affective	Counsel a pregnant lady about the complications of pregnancy
	Assessment of fetal wellbeing	1	Cognitive	Explain the methods of assessment of fetal wellbeing
			Cognitive	Explain the types and diagnosis of fetal abnormalities

	Prenatal diagnosis	1	Cognitive	Explain the reasons, classification and methods of prenatal diagnosis
	Antenatal maternal and obstetric complications	1	Cognitive	Discuss musculoskeletal, gastroenterological and hematological problems associated with pregnancy
			Cognitive	Discuss the risk factors and management of venous thromboembolism in pregnancy
		1	Cognitive	Explain the causes, complications and management of polyhydromnias and oligohydromnias
			Cognitive	Discuss the etiology, complications and management of fetal malpresentations
		1	Cognitive	Explain the approach and management of a pregnant lady with antepartum bleeding
			Cognitive	Discuss the etiology, prevalence, management and prevention of Rh isoimmunization

	Preterm labor <ul style="list-style-type: none"> <li>• PROM</li> <li>• PPRM</li> </ul>	1	Cognitive	Discuss the etiology, complications and management of preterm labor
Family medicine/ Obstetrics	Hypertensive disorders in pregnancy	1	Cognitive	Classify hypertension in pregnancy and disorders of hypertension in pregnancy
			Cognitive	Discuss the diagnostic approach, management, complications and prevention of Pre-eclampsia and Eclampsia
Family medicine/ Obstetrics	Diabetes mellitus and pregnancy	1	Cognitive	Explain the management of a pregnant lady with gestational DM and overt DM
Obstetrics	Perinatal infections	1	Cognitive	Classify perinatal infections
			Cognitive	Explain the screening and preventive strategies of common perinatal infections
	Labor	1	Cognitive	Explain the management of normal labor at different stages
			Cognitive	Explain the management of abnormal labor at different stages
		1	Cognitive	Discuss the indications and complications of

				analgesia and anaesthesia in labor
	Management of labor at special circumstances	1	Cognitive	Discuss the management of labor at special circumstances like uterine scar, fetal malpositions, fetal death, multiple pregnancies and post-date pregnancies
			Cognitive	Explain the types, indications and complications of operative deliveries
			Cognitive	Discuss the indications and complications of a Caesarian section
			Psychomotor	Observe normal labor and assisted deliveries
	Obstetric emergencies	1	Cognitive	Classify obstetric emergencies
			Cognitive	Discuss the management of sepsis in pregnancy
			Cognitive	Explain the management and complications of placental diseases in a pregnant women
			Psychomotor	Observe a normal delivery
	Postpartum bleeding	1	Cognitive	Discuss the etiology, diagnostic and management approach to

				a patient with postpartum hemorrhage
	Puerperium		Cognitive	Classify puerperal disorders and their management
Psychiatry	Psychiatric disorders in pregnancy and puerperium	1	Cognitive	Classify different psychiatric disorders in pregnancy and puerperium
			Cognitive	Discuss the management of puerperal psychosis and depression
			Affective	Counsel a patient and her family with postpartum psychosis/depression
Pediatrics	The neonate	1	Cognitive	Discuss the types and management of common problems of preterm and term babies
			Cognitive	Discuss the principles of neonatal care
			Psychomotor	Observe the care of a neonate in nursery
				Take history and perform physical examination of a neonate
Surgery	Breast diseases	1	Cognitive	Discuss approach to a patient with breast lump emphasizing on diagnostic work-up of different breast

				pathologies (complexity of benign and malignant breast diseases) including imaging and procedures
		1	Cognitive	Discuss the diagnostic approach and management of a patient with nipple discharge
			Psychomotor Skills	Perform a Clinical breast examination by all techniques including “radial wagon wheel” and “spoke” method
			Affective domain	Counsel a patient with breast cancer about the diagnosis, management and screening of her family members

### Total hours of different subjects in the cognitive domain

S. No	Subject	Hours allocated
1	Medicine	13
2	Gynaecology	14
3	Surgery	04
4	Pediatrics	04
5	Psychiatry	01
6	Nephrology	01
7	Family medicine	03
	<b>Total</b>	<b>40 hours</b>