

REPRODUCTIVE MODULE

PHASE II



**FACULTY OF MEDICAL SCIENCES
UNIVERSITY OF SRI JAYEWARDENEPURA**



REPRODUCTIVE MODULE PHASE II



Faculty of Medical Sciences
University of Sri Jayewardenepura
Gangodawila
Nugegoda



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GENERAL OBJECTIVES

On completion of the Reproductive Module, the graduate should be able to:

1. Apply the knowledge on the anatomical, physiological and other biological phenomena, to understand the congenital anomalies in the genital tract in the male and the female.
2. Diagnose and manage the diseases that affect the breast.
3. Apply the principles of pathology to understand the disease process that affect the reproductive system.
4. Diagnose and manage infections that affect the reproductive system and develop management protocols.
5. Describe the reproductive health concept.
6. Provide the basic care at primary (care at home and at field clinics) and secondary level in pregnant women.
7. Manage pregnant women and pregnancy related complications, when they practice on their own after qualifying.
8. Manage uncomplicated labour, recognize complications of labour, lactation and normal and abnormal puerperium.
9. Care of the normal neonate.
10. Recognize and manage neonatal problems.
11. Understand the concepts and methods available to diagnose gynaecological problems when they practice on their own after qualifying
12. Understand the role of contraception in promoting reproductive health.
13. Understand the causes and management of infertility.

Introduction

The reproductive module is a five weeks module that you will follow during phase two of your medical curriculum. This module will help you to develop a deeper understanding and knowledge of the disorders related to the reproductive system . You are expected to learn about clinical features of reproductive disorders, and how to arrive at a diagnosis, the clinical course, treatment, follow up and the expected out come. Further more this module will introduce you to the management of important neonatal conditions and child health.

This module should be considered as a guide to the relevant topics but not as a comprehensive coverage of whole subject area. Therefore the emphasis should be on active learning and self study by you using the module as a guide.

Teaching of this module will be in the form of lectures , tutorials, problem based learning, practicals and teacher-student seminars. The teaching will be conducted jointly by clinical & paraclinical departments of the faculty.

The assessment will be in the form of an end of term module exam (MCQ) and an end of year summative assessment.

Main content areas

- Reproductive embryology
- Breast diseases
- Diseases of the reproductive system
- Diagnosis and management of the diseases that affect the reproductive system
- Reproductive health concept
- Maternal and child health care
- Ante partum, Intra partum and post partum care
- Contraception
- Infertility

OBJECTIVE 1

Intermediate Objectives	Detailed contents	Method of Teaching	Duration	Department
1. Recall the reproductive embryology	A. Gametogenesis Fertilization Early fetal development Sex differentiation Development of female And male genitalia	Seminar	45 min	Physiology Anatomy
2. Diagnose Intersex and implications on reproductive health	B. Chromosomal abnormalities Gonadal aberrations End organ resistance Female intersex	}	}	}
3. Female reproductive System	A. Gonadal abnormalities Congenital anomalies of the genital tract Uterine abnormalities			
4. Male reproductive system	A. Scrotal lumps Hernia Hydrocele	Lecture	45 min	Surgery

OBJECTIVE 2

Intermediate Objectives	Detailed Contents	Method of Teaching	Duration	Department
1. Know w the initial steps to be carried out in a patient presenting with symptoms related to breast diseases	A. Common presentations History taking from a patient presenting with breast disease	PBL	45 min	Surgery
	B. The technique of examination of a patient presenting with a breast lump	Group activity Skills lab	45 min	Surgery
2.Diagnose and manage the diseases that affect the breast	A. Pathophysiology of common benign and malignant breast diseases	Lecture Practical	45 min	Pathology
	B. Investigations and treatment options of benign breast diseases Management of common presentations / when to refer	Lecture	45 min	Surgery
-Do-	C. Malignant breast diseases Risk factors Prevention Presentation Investigations Staging Tumour markers Treatment options Screening Breast reconstruction Complications of breast surgery Follow up patients with breast cancer	Lecture	45 min	Surgery
		Tutorial	45 min	Pathology

OBJECTIVE 3,4,11

Intermediate Objectives	Detailed contents	Method of Teaching	Duration	Department
1. Menstrual disorders	Physiology of puberty and Menstrual cycle	Tutorial	45 min	Physiology
	Amenorrhoea -Primary -secondary	Lecture	45 min	Obstetrics & Gynaecology
	Dysmenorrhoea - Primary - secondary	Lecture	45 min	Obstetrics & Gynaecology
	Dysfunctional uterine bleeding (DUB) Menorrhagia	Tutorial	45 min	Obstetrics & Gynaecology
	Pathological aspect of menstrual abnormalities Endometrial Hyperplasia	Lecture Practical	45 min	Pathology
2. Infections of genital tract	Upper and lower genital tract infections All Sexually Transmitted Infections(STI) HIV/ AIDS Trichomonas	3 Lectures Seminar	45 minx3	Microbiology Micro, Obstetrics & Gynaecology Family Medicine
	STI Specimen collection & transport Identification of organisms	Practical	45 min	Microbiology

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Intermediate Objectives	Detailed content	Method of Teaching	Duration	Department
3. Tumours of female genital tract	Benign and malignant tumours of Uterus Ovaries and tubes Vulva and vagina	2 Lectures	45 min x 2	Pathology
4. Tumours of male genital tract	Benign and malignant tumours	2 Lectures Practical Tutorial	45 min x 2	Surgery Pathology
5. Problems in post reproductive life	Utero vaginal prolapse	PBL	45 min	Obstetrics & Gynaecology

OBJECTIVE 5, 6

Intermediate Objectives	Detailed content	Method of Teaching	Duration	Department
1. Describe Reproductive Health (RH) concept	Definition of RH Components of RH Family Health program in Sri Lanka- objectives & strategies Safe motherhood	Lecture	45 min	Community Medicine
2. Organization and delivery of maternal & child health services of Sri Lanka	The need for maternal & child care The role of MOH, PHN & PHM Pre conceptual counseling Antenatal care	Lecture	45 min	Community Medicine
3. Describe maternal & child health services provide at the field level	Clinical activities Investigations Vitamin & Mineral supplementation Tetanus toxoid Maintenance of records & returns Screening for high risk conditions & referral Natal care Importance of hospital delivery The need for trained assistance for home deliveries	Lecture Clerkship	45 min	Community Medicine

4. Describe infant & child health services	Child health services- Institutional & field Role of public health staff in delivery of child health services	Lecture Clerkship	45 min	Community Medicine
5. Describe activities of the well baby clinic	Organization Facilities available and delivery of services	Lecture	45 min	Paediatrics
6. To be able to describe methods of minimizing childhood mortality Describe the school health services	Causes of infant and childhood mortality Methods/ strategies to minimize School health programme: -objectives - components - deficiencies	Lecture Clerkship	45 min	Community Medicine Community Medicine
7. Adolescent Health	Importance Health, social and mental problems Nutrition	Seminar	45 min	Community Medicine Obstetrics & Gynaecology Paediatrics Family Medicine
8 Describe measures of preventing maternal deaths	Define maternal death Causes of maternal mortality / morbidity in SL & global situation Factors contributing to decline maternal mortality in SL Further reduction of deaths Investigation of maternal death Interpretation of autopsy findings	Lecture Clerkship	45 min	Community Medicine Forensic Medicine

9. Describe activities of well women clinic	Objectives Activities	Clerkship		Community Medicine
10 Describe monitoring and evaluation of maternal and child health services	Importance of monitoring and evaluation of antenatal and postnatal and outcome indicators	Clerkship		Community Medicine

OBJECTIVE 7

Intermediate Objectives	Detailed contents	Method of Teaching	Duration	Department
1. Describe maternal physiological changes in pregnancy Development of fetus & its adaptation at birth	Normal changes in pregnancy Fetal development	Seminar	45 min	Obs tetrics & Gynaecology Anatomy Physiology
2. Manage bleeding in pregnancy Septic conditions in pregnancy	Antepartum haemorrhage Ectopic pregnancy Trophoblastic disease Miscarriages Septic miscarriages	3 Lectures Seminar (phase III)	45 min x 3 45 min	Obstetrics & Gynaecology
3. Manage medical disorders in pregnancy	Hypertensive / renal disorders Diabetes & endocrine disorders Coagulation disorders Anaemia Heart disease Infections Nutrition Psychiatric & neurological disorders Liver disorders (will be discussed in GIT module)	5 Lectures PBL Seminar	45 min x 5 45 min 45 min	Medicine Obstetrics & Gynaecology Community medicine Psychiatry
-do-	Principles in prescribing	Seminar	45 min	Pharmacology Obstetrics & Gynaecology Family medicine
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4. Describe & manage problems in pregnancy affecting fetal outcome	Intrauterine growth retardation(IUGR) Multiple pregnancy Preterm labour Abnormal presentations (PBL) Past dates (lecture) Fetal distress (PBL) Antenatal management of fetal congenital anomalies (lecture) Intrauterine death (PBL) Rh isoimmunization (tute)	<p style="text-align: center;">4 Lectures</p> <p style="text-align: center;">5 PBL</p> <p style="text-align: center;">Seminar (phase 111)</p>	45 min x 4 45 min x 5 45 min	Obstetrics & Gynaecology
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OBJECTIVE 8

Intermediate Objectives	Detailed contents	Method of Teaching	Duration	Department
1.Management of normal labour	Diagnosis of labour Components of natural labour Maintenance of labour Maintenance of partogram	Lecture	45 min	Obstetrics & Gynaecology
	Oxytocic drugs	Seminar	45 min	Pharmacology Obstetrics & Gynaecology
2.Management of abnormal labour	Malposition & malpresentation	PBL	45 min	Obstetrics & Gynaecology
	Diagnosis & management of maternal injuries related to child birth Obstetric operations & procedures	Seminar (phase III)	45 min	Obstetrics & Gynaecology
	Forceps, vacuum & caesarian sections VBAC(Vaginal Birth After Caesarian Section)	Lecture	45 min	Obstetrics & Gynaecology
	Obstetric emergencies	Seminar (phase III)	45 min	Obstetrics & Gynaecology

3.Normal & abnormal puerperium	Physiology of puerperium Complications of puerperium Third stage of labour & its complications PPH Retained placenta	Lecture Seminar (phase III)	45 min	Obstetrics & Gynaecology
4.Lactation	Physiology of lactation Establishment of lactation Problems associated with lactation Baby friendly hospital initiative Ten steps to successful breast feeding	Seminar	45 min	Community Medicine Paediatrics Family Medicine
5.Infant feeding	Breast feeding: Composition of breast milk Advantages- mother & infant Contraindications Assessment of adequacy Formula feeding: Concepts of formula I, II, III Special formulae: Advantages & disadvantages Absolute indications Complementary feeding(CF) : Concept of CF Planning to CF Value of different weaning foods (CF), Kanji, fruit juices, home made CF, commercial CF Composition, constitution, frequency, problems/misconceptions	Lecture Clerkship	45 min	Paediatrics

OBJECTIVE 9, 10

Intermediate Objectives	Detailed contents	Method of Teaching	Duration	Department
1.Care of the newborn including common problems	Management of a term neonate at delivery & the immediate neonatal period Neonatal screening Identify & manage : Umbilical sepsis, eye infections, pustules	Lecture	45 min	Paediatrics
	Neonatal infections	Seminar	45 min	Paediatrics Family Med Microbiology
2.Diagnosis & management of neonatal problems	Prematurity/IUGR/Large for dates baby Neonatal sepsis Neonatal jaundice Birth asphyxia Neonatal convulsions Diagnosis & management of respiratory Distress Surfactant deficiency Congenital pneumonia Meconium aspiration Transient Tachypnoea in Newborn(TTN) Birth asphyxia & meconium aspiration	3 Lectures PBL Seminar	45 minx3	Paediatrics

OBJECTIVE 12

Intermediate Objectives	Detailed contents	Method of Teaching	Duration	Department
1. Describe different family planning methods available in SL Describe the fertility control policy in S L	Hormonal contraceptives Barrier methods Devices Measures of fertility Goals, Targets & objectives List advantages of family planning(FP) Contraceptive prevalence & FP indicators Unmet need of family planning(FP) Counseling	SGD (clerkship)		Community Medicine
2. Educate the people & promote the use of contraceptives	The role of hospital doctor, MOH, PHN, and midwife in the hospital setting & in the field	Seminar	45 min	Community Medicine Family Medicine Obstetrics & Gynaecology
3. Types of oestrogens & progesterone preparations(RECALL) Parenteral & oral contraceptives	Indications for their use, mechanisms of actions, clinical uses, method of administration and adverse effects & contraindications Different types of oral contraceptive pills (OCP) preparations Mechanism of action, adverse effects, precautions, contraindications & interactions Prescribing, Counseling Non contraceptive benefits of OCP	SGD		Pharmacology
		Seminar	45 min	Pharmacology Family Medicine

4. Describe the other different types of methods used by females & males including surgical methods	Rhythm method Methods of use, benefits & advantages of the different devices Indications Contraindications	} FLM	45 min	Obstetrics & Gynaecology Pharmacology Family Med
5. Emergency contraceptives	Different preparations available How & when to use them Adverse effects, precautions & contraindications for their use			

OBJECTIVE 13

Intermediate Objectives	Detailed contents	Method of Teaching	Duration	Department
1. Background diagnosis & counseling in infertility	Introduction Prevention of infertility Planning a pregnancy Investigating infertility Counseling	Seminar (phase III)	45 min	Obstetrics & Gynaecology Psychiatry
2. Management of Infertility	Female- causes Coital problems, uterine causes, problems with ovulation, cervical factors Male – causes Coital problems Abnormalities in sperm count & mortality Sexual dysfunction Unexplained infertility Investigation of infertility	Lecture Tutorial (phase III) Seminar (phase III)	45 min 45 min 45 min	Obstetrics & Gynaecology Obstetrics & Gynaecology Psychiatry
3. Treatment of infertility & complications	Ovulation induction Assisted reproductive technique Intra Uterine Insemination (IUI) Gamete intra fallopian transfusion (GIFT) In Vitro fertilization (IVF) OHSS Multiple pregnancy	Lecture	45 min	Obstetrics & Gynaecology

Reading Material

Paediatrics

1. Illustrated text book of Paediatrics
Prof Tom Lissaur & Graham
Clayden
2. Essential Paediatrics – Ghai
3. Paediatrics – Anthony de Milner & David Hull

Anatomy & Physiology

1. Langman
2. Emery's element of Medical Genetics –
Student notes in Genetics – Young and Muller
3. Review of Medical Physiology –
William F. Ganong 21st Edition
4. An aid to clinical surgery – Williamson Waxman scott

References

1. Moors – developing Embryo
2. Before we are born – Essentials of Embryology and birth defects
Keith L. Moore, Vid Persand
3. Human Genetics – concepts and applications Ricki Lewis
4. ABC in Genetics

Obstetrics & Gynaecology

1. Text book of Gynaecology - D.C. Dutta
5th Edition
2. Text book of Obstetrics - D.C. Dutta
5th Edition
3. Gynaecology by Ten teachers – Stuart Campbell, Ash Monga
17th Edition
4. Obstetrics by Ten teachers – Stuart Campbell, Christopher Less
17th Edition

Parasitology

1. Basic Clinical Parasitology – 6th Edition
Franklin A. Neva, Harold Brown

Microbiology

1. Microbiology in clinical practice – D.C. Chanson
2. Medical Microbiology – edited by Cedric A Mimms, John H.L. Playfair,
Ivan M. Roitt, Derek Wakelin, Rosamind Williams
3. Medical Microbiology – 16th Edition
David Greenwood, Richard C.B. Sluck

Pathology

1. Robbins and Cotran – Pathological basis of disease
Kumar, Abbas, Fausto
2. Muir's textbook of Pathology
McSween, Whaley
3. Textbook of Pathology
Harsh Mohen
4. Concise Pathology
Chandrasoma, Taylor