

Syllabus

OBSTETRICS AND GYNECOLOGY

for MBBS

A. GOALS:

The main goal of the teaching of MBBS students in OBG is that he/she should acquire understanding of anatomy, physiology and pathology of the reproductive system and gain the ability to diagnose and manage common gynecological and obstetric conditions.

B. OBJECTIVES:

1. KNOWLEDGE : At the end of the course, the student should be able to:

a). Outline the anatomy, physiology and pathophysiology of the reproductive system

and the common conditions affecting it.

b). Diagnose normal pregnancy, labour, puerperium and manage the problems affecting them.

c). Having knowledge of leading causes of maternal and perinatal morbidity and mortality.

d). Understand the principles of contraception and various techniques and methods of MTP and sterilisation.

e). Identify the side effects of drugs in pregnancy.

f). Understand the national programme of maternal and child health and family

welfare.

g). Diagnose common gynaecological diseases and manage them.

h). Know the indications, techniques and complications of surgeries like Caesarean section, laparotomy, abdominal and vaginal hysterectomy, Fothergill's operation and vacuum aspiration for M.T.P etc.

2. SKILLS : At the end of the course, the student should be able to:

a). Examine a pregnant woman; recognise high risk pregnancies and make appropriate

referrals.

b). Conduct a normal delivery, recognise complications and provide postnatal care.

c). Resuscitate the newborn and recognise congenital anomalies.

d). Advise the use of various available contraceptive devices and assist in insertion in and removal of intra-uterine contraceptive devices.

e.) Perform pelvic examination, diagnose and manage common gynaecological problems including early detection of genital malignancies.

f). Make a vaginal cytological smear, perform a post coital test and wet vaginal smear

examination for *Trichomonas vaginalis*, moniliasis and gram stain for gonorrhoea.

g). Interpretation of data of investigations like biochemical, histopathological, radiological, and ultrasound etc.

3. INTEGRATION: The student should be able to integrate clinical skills with other disciplines and bring about

coordinations of family welfare programmes for the national goal of family

planning.

4. GENERAL GUIDELINES FOR TRAINING:

a). Attending of OBG wards of the hospital:

(i) antenatal care

(ii) the management of the puerperium

(iii) a minimum period of 24 weeks in-patient & out-patient training

including family planning.

b). One month shall be spent as a resident in a labour ward of the hospital during which, the student shall conduct at least 10 cases of labour under supervision and assist in 10 other cases. The satisfactory written histories of the cases conducted including antenatal and postnatal observations by the student to be supervised by residents or consultants.

5. FAMILY PLANNING:

Training in Family Planning should be emphasized in all the three phases and during

Internship.

OBSTETRICS & GYNECOLOGY

4th Semester

1. Anatomy of the female reproductive system including the urinary apparatus and applied

anatomy.

2. Menstruation, gametogenesis, and spermatogenesis.
3. Fertilization, implantation and development of embryo.
4. Fetal physiology including fetal circulation.
5. Structure and functions of placenta, umbilical cord, liquor amnii and their clinical application including abnormalities of placenta.
6. Maternal physiological changes during pregnancy.

5th Semester

1. Diagnosis of pregnancy – clinical symptoms, signs & Laboratory aids and investigations.
2. Vomiting during pregnancy including hyperemesis gravidarum.
3. Other minor ailments of pregnancy and management (desirable)
4. Maternal nutrition and diet during pregnancy and obstetrical complication of malnutrition.
5. Harmful effects of drugs, smoking and alcohol during pregnancy.
6. Antenatal care, antenatal advices, RCH programme NRHM programme, Janani Suraksha yojna, PNDT Act (Desirable).
7. Complications of early pregnancy.
 - Abortion -threatened, inevitable, missed, habitual, septic abortion.
 - ectopic pregnancy – Diagnosis and management
 - Vesicular mole - Diagnosis, management, and complication.

6th Semester

1. Normal labour- physiology, mechanism, course and management of normal labour and

conduct of normal labour.

2. Maternal pelvis, fetal skull and pelvic assessment.

3. Pain relief during labour.

4. Active management of labour – use of Partogram

5. Active management of 3rd stage of labour

6. Multiple pregnancy.

7. Polyhydramnios and Oligohydramnios

8. Antepartum haemorrhage – classifications, clinical features, investigations, management and complications.

9. Maternal Mortality, Perinatal Mortality – M.M.R. in India – causes and Prevention,

PNMR in India – Causes and Prevention.

10. Puberty and Adolescence.

11. Menopause.

12. Anatomy of Genitourinary system, Anterior Abdominal wall and pelvic floor.

7th Semester

(A) Obstetrics

1. Pre term labour-Causes, Diagnosis, principle of management & prevention of preterm

labour various tocolytics and delivery of preterm baby. Neonatal problems of preterm baby.

2. Pre mature rupture of membranes, Causes, Management and Complications

3. Rh negative pregnancy – Diagnosis, evaluation, management, Prevention, of

isoimmunisation.

4. Hemolytic Diseases of newborn

5. Medical Disorder of pregnancy

6. Anemia in pregnancy – causes, classification of various types of anaemia, Nutritional

Anaemia their diagnosis and Management, Prevention of anemia.

7. Heart Disease during pregnancy: - Classification, evaluation, Complication during pregnancy and labour, Contraception.

8. Diabetes Mellitus and pregnancy:- Classification, Diagnosis, screening for GDM, management of Diabetes mellitus during and labour, management of neonate of a diabetic mother

9. Infection during pregnancy:- UTI, Malaria, syphilis, tuberculosis, Hepatitis, HIV, Torch infections during pregnancy and their management

10. Complication of III stage of labour:-

11. PPH :- Definition, types, Diagnosis & Management of PPH

12. Retained placenta, Manual Removal of Placenta (MRP)

13. Inversion of uterus causes management (Desirable to know)

(B) Gynecology

1. Development of female genitourinary system. Malformation and clinical significance

of uterine anomalies, classifications and diagnosis and reproductive outcome and indication for surgical management.

2. Menstrual Abnormalities – Normal menstrual pattern and physiology of menstrual cycle

3. Amenorrhea Primary and Secondary - Classification, Investigation, Principles of management including cryptoamenorrhea.

4. Puberty and Adolescence – problems – Dysmenorrhea, Puberty menorrhagia

5. Abnormal uterine bleeding (AUB) - Causes, Investigations, Classifications,

Diagnosis

and management

6. DUB- Causes, Classification, Investigation & management.

7. Family Planning –

i National Family Welfare Programme in India and its evaluation to present status

ii. Contraception –Various, methods of contraception, Advantage, Side- effects & failure rates, Selection of patients & counselling.

iii. IUCD

iv. -Emergency contraception

v. MTP- MTP Act, indications, Contraindications, Various methods of 1st & 2nd trimester MTP & complication, Concurrent contraception.

vi. Permanent methods of Sterilization including laparoscopic tubal occlusion and non scalpel vasectomy.

8th Semester

(A) Obstetrics

1. Malpresentation and Malposition .

2. Mechanism of labour, Diagnosis and management of each presentation and malpositions.

a. occipito posterior position of vertex

b. Breech

c. Face

d. Brow

e. Transverse lie and shoulder presentation

- f. Cord presentation / prolapse
3. Assessment of pelvis.
4. Contracted pelvis, diagnosis and management
5. Trial of labour
6. Obstructed labour and rupture uterus.
7. Abnormal / Dysfunctional labour and inordinate uterine action.
8. Hypertensive Disorders of pregnancy
9. Eclampsia- complication & management
10. Induction and Augmentation of labour:

(B) Gynecology

1. Defence mechanism of vulva, vagina and variations with age, Physiological and Pathological causes of vaginal discharge , Infection of vulva of vagina .
2. Pelvic inflammatory Disease-Definition, causes and management.
3. HIV/ AIDS
4. Genital TB- diagnosis and management.
5. Pelvic organ prolapse -Classification, Causes, Diagnosis, Investigations and management in relation to age & parity. preventive aspects.
6. Benign tumours of Genital Organs.
7. Fibromyoma of uterus- causes, Investigation, Complications, Diagnosis & management.
8. Tumours of ovary Benign/Malignant- Etiology , Pathology , Classification, Diagnosis, and management.
9. Endometrioses

10. Premalignant lesion & malignancies of genital tract.
11. Epidemiology, Diagnosis of premalignant & malignant lesions of cervix.
12. Screening for cancer cervix.
13. Cervical Cancer.
14. Endometrial cancer.
16. Cancer of vulva and vagina.

9th Semester

(A) Obstetrics

1. Antenatal and intranatal foetal surveillance
2. Foetal distress, Diagnosis and management.
3. Normal puerperium – course & management
 - a. Physiology of Lactation
 - b. Breast feeding
 - c. Common problems like cracked nipple, retracted nipple including lactation failure.
4. Abnormal puerperium
 - Puerperal Sepsis- prevention, Diagnosis and management.
5. Special cases in obstetrics
 - a. IUGR- Causes, Diagnosis and Management
 - b. IUFD - Causes, Diagnosis and Management
 - c. Post date pregnancy – Evaluation and Management. Neonatal problems of post term babies.
 - d. Post caesarean pregnancy
 - e. VBAC.

f. Grand Multipara

g. Elderly primi gravida

j. BOH

6. Operative obstetrics:

a. Episiotomy-Indications, Technique & complication including vulval haematoma.

b. Caesarean Section- Indication, Technique & complications.

c. Forceps & vantouse deliveries, external cephalic version

d. Cervical circlage.

e. Manual removal of placenta.

f. Destructive operation (desirable to know)

Gynecology

1. Infertility

-Definition of infertility & sterility

-Causes & Investigations of infertility.

-Cause of anovulation & Induction of Ovulation.

-Tests for ovulation & tubal patency

- Management of tubal factors of infertility including recanalisation.

-ART & success (desirable to know)

2. Urinary Incontinence

-Classification & Differential Diagnosis.

-Genital fistula including VVF, Diagnosis & Management, Post-coital injuries.

-Investigations & management of Stress Incontinence.

-Surgical management of SUI (desirable to know)

3. Menopause-problems

-Menopausal symptoms & management of menopausal Syndrome, HRT.

-Causes & Investigation of post-menopausal bleeding

- Gestational trophoblastic Disease with desire (Brief out line only)

4. Operative Gynecology

(a) Induction, Technique & complication of

. D & C

. Fractional curettage

. Vaginal hysterectomy

. Ward – Mayo's operation

. Manchester repair

. Abdominal Hysterectomy

. Ovariectomy

. Tubal sterilization

. Diagnostic Laparoscopy

. Staging laparotomy for endometrial & ovarian cancer

. Diagnosis and principles & management of post operative complication

Curriculum

M.D. Obstetrics and Gynecology

The infrastructure and faculty of the department of Obstetrics and Gynecology is as per MCI regulation.

Goal

The aim of MD course in Obstetrics and Gynecology is to produce a competent Obstetrician and Gynecologist who:

- Recognizes the health needs of women in reproductive age, adolescents and post menopausal women and treats them in accordance with principles of National Health Policy and professional ethics.
- Is competent to manage the pathological states related to reproductive system with knowledge of fundamentals.
- Is aware of contemporary advances and developments in the field of obstetrics and gynecology
- Is oriented to principles of medical research.
- Is skilled in educating medical and paramedical students.

Objectives

The aim of MD course in Obstetrics and Gynecology is to produce a competent Obstetrician and Gynecologist who will be able to:

- Provide quality maternal care in the diagnosis and management of Antenatal, Intra-natal and Post natal period of normal and abnormal pregnancy.
- Provide counseling and knowledge regarding family planning methods and perform MTP.
- implement maternal components in the "National Health Programs".
- Develop adequate surgical skills to manage common Obstetrical and Gynecological problems.
- Manage normal and abnormal pregnancy during Antenatal, Intra-natal & Post-natal period.
- Be aware of Gynecological Endocrinology and Infertility
- Benign & malignant Gynecological diseases.
- Operative procedures including Endoscopy
- Knowledge of interpretation of various laboratory investigations and other diagnostic modalities in Obstetrics & Gynecology.
- Medical & Surgical problems and Anesthesiology related to Obstetrics and Gynecology.
- Knowledge of essentials of Pediatric & Adolescent Gynecology.
- Reproductive & Child Health, Family Welfare
- Reproductive tract infections, STD and HIV AIDS issues.
- Demonstrate skills in documentation of case details and of morbidity and mortality data
- Knowledge of medico legal aspects in Obstetrics and Gynecology.
- Be familiar with research methodologies and use of newer information technologies.
- Keep abreast with advances in the field of Obstetrics & Gynecology.

- Facilitate learning of medical / nursing students, para medical health workers as a

teacher

- Demonstrate empathy & humane approach towards patients and their families.
- Be a productive member of a team engaged in health care, research and education.

Syllabus

Theory

Obstetrics

- Gametogenesis fertilization, implantation and early development of embryo
- Anatomical and Physiological changes in female genital tract during pregnancy.
- Pharmacology of drugs used during pregnancy, Labour, Post-partum period. -
Development of placenta.
- Amniotic fluid.
- Anatomy of fetus, fetal growth & development, fetal physiology & circulation.
- Abortions
- Ectopic pregnancy
- GTD
- Normal Labor
- Puerperium
- Malpresentation & malposition
- CPD and its management
- Complications of 3rd stage of labour
- Hypertensive disorders in pregnancy
- Antepartum Hemorrhage
- PROM, Poly Hydramnios, Oligo Hydramnios
- Postpartum Hemorrhage
- Medical disorders in pregnancy
- Emergency Obstetric Care
- Antepartum and intrapartum fetal monitoring.
- IUGR
- Pre term labor
- Post term pregnancy

Gynaecology

- Normal and abnormal microbiology of genital tract
- Bbacterial, viral & parasitic infection
- Endocrinology related to reproduction
- Physiology of menstruation, ovulation, fertilization & menopause.
- Methods of contraception.
- Fibroid uterus
- Colposcopy & vaginal and cervical cytology
- Endometrial Hyperphasia, DUB, Abnormal bleeding.
- Endometriosis and Adenomyosis
- Endocrine abnormalities, Menstrual abnormalities Amenorrhoea,
- PCOD, Hirsutism, Hyperprolactinemia, Thyroid disorders.
- Laparoscopy and Hysteroscopy
- Ca Cervix
- Ca Endometrium
- Carcinoma Ovary
- Menopause
- Genital Fistulae / Urinary Incontinence
- Prolapse
- Contraception / Family Planning / Sterilization methods
- Endometriosis, Adenomyosis

- Infertility.

Practical

Obstetrics

- Venepuncture
- Amniotomy - Conduct of normal Vaginal delivery
- Perineal infiltration & Pudendal block
- Episiotomy
- Ventouse delivery
- Forceps delivery - Management of Genital tract injuries
- Exploration of Cervix
- Lower Segment Caesarean Section
- Manual Removal of Placenta
- Breech vaginal delivery
- External Cephalic Version
- Delivery of twins - Management of shock
- Management of Postpartum hemorrhage
- Cervical Cerclage
- Amnioinfusion
- Instillation of extra amniotic & intra amniotic drugs
- Non stress Test
- Suction Evacuation
- Dilatation & Evacuation

- Repair of complete perineal tear - Repair of cervical tear
- Caesarean Hysterectomy
- Internal iliac artery ligation
- Uterine and Ovarian Artery ligation
- Destructive operations
- Reposition of inversion uterus
- Amniocentesis

Gynaecology

- Pap Smear
- Wet smear examination - Post Coital Test
- Endometrial Biopsy
- Endometrial Aspiration
- Dilatation and Curettage/Fractional Curettege / Polypectomy
- Cervical Biopsy
- Cryo / Electrocautery of Cervix
- Hysterosalpingography
- Diagnostic Laparoscopy and Hysteroscopy
- Operations for uterovaginal prolapsed
- Operations for Ovarian tumors
- Operations for Ectopic pregnancy
- Vaginal hysterectomy - Abdominal Hysterectomy
- Myomectomy
- Colposcopy
- Loop Electro Surgical Excision Procedure
- Tuboplasty
- Abdominal Paracentesis - Culdocentesis
- Endoscopic surgery (- Repair of genital fistulae
- Operations for Urinary incontinence
- Radical operations for gynaecological malignancies
- Vaginoplasty - Intrauterine insemination
- Basic ultrasound / TVS
- Hydrotubation -
- Vulval Biopsy

Family Planning -

- Intra Uterine Contraception Device Insertion / removal
- Female sterilization
 - Post Partum Interval

- Open & Laparoscopic
- MTP

4. Teaching Programme

General Principles

Achieving theoretical and practical competencies being the keystone of postgraduate

medical education, postgraduate training should be skills oriented. Learning in postgraduate program is essentially self-directed and primarily emerge from clinical and academic work. The formal sessions are meant to supplement the basic endeavour.

Teaching Sessions:

- Clinical case discussions
- PG Bed side teaching rounds on ward days
- Seminars
- Journal Club
- Statistical meetings
- Mortality meetings
- Interdepartmental Meetings : Pediatrics, Radiology and pathology
- Others – Guest Lectures and Seminars

Teaching Schedule

The Suggested departmental schedule is as follows

1. Seminar / Symposium once a week
2. Journal Club once a fortnight
3. PG Case discussion Once a week
- 4 Bedside teaching round on ward days

5. Intradepartmental Statistical Meet once a month
6. Interdepartmental meet which includes meet with other specialties e.g. Medicine, Pathology, Microbiology, Radiology, Anaesthesia.
7. Perinatology Meet with Pediatric department discussing any neonatal death in inborn babies and other topics of common interest once a month
8. Thesis meet to discuss thesis being done by the PG residents once a month
9. Grand round of the wards once a week
10. Clinico pathological meeting (held in Medical Education Unit once a week)
11. Guest lectures, Seminars,
12. Statistics, Research Methodology, Teaching Methodology

5. Postings

--Emphasis should be self-directed learning, group discussions, case presentations and practical hands on learning.

-Student should be trained about proper history taking, clinical examination and relevant investigations

-Training in medical and surgical management by posting the candidates in OPD, specialty clinics, wards, operation theatres, labour room, family planning clinics and other

departments like neonatology, radiology, anesthesia. The candidates must be trained to manage all emergencies

situations seen frequently.

-Gynaecology Ward

-Labour-room

-Emergency

- Family Planning

-Operation Theatre

6. Thesis

i) Every candidate shall carry out work on an assigned research project under the guidance of a recognized Postgraduate Teacher, the project shall be written and submitted in the form of a thesis.

ii) Every candidate shall submit thesis plan to the University within twelve months from the date of admission.

iii) Thesis shall be submitted to the University six months before the commencement of theory examination.

iv) The student will identify a relevant research topic, conduct a review of literature, determine the most suitable study design; formulate the objectives of the study, prepare a protocol; and undertake the study according to the protocol.

7. ASSESSMENT

All the PG students will be assessed daily for their academic activities and also periodically.

General Principles

- The assessment will be valid, objective, and reliable.
- It will cover cognitive, psychomotor and affective domains..,
- Thesis will also be assessed separately.

Formative Assessment

The formative assessment will be continuous as well as periodical. The former is to be based on the feedback from the senior residents and the consultants concerned.

Internal Assessment

The performance of the Postgraduate student during the training period will be monitored throughout the course based on the following:

1. Personal attributes:

- Behavior and Emotional Stability
- Motivation and Initiative
- Honesty and Integrity
- Interpersonal Skills and Leadership Quality

2. Clinical Work:

- Availability
- Diligence
- Academic ability
- Clinical Performance

3. Academic Activity:

- Performance during presentation at Journal club/ Seminar/ Case discussion/Statistical meeting and other academic sessions.

4. End of term theory examination:

- Will be conducted at end of 1st, 2nd year and after 2years 9 months

5. End of term practical examinations

- after 2 years 9 months.

The Internal assessment should be presented to the Board of examiners for

due consideration at the time of Final Examinations.

8. Job Responsibilities

i) OPD :

- History & Work up of all cases and presentation to the consultants. This includes all the special clinics
- . - Documentation in OPD Card, register completion and maintenance.

ii) Minor Procedures

- Aseptic Dressings / Stitch removal / Pap smear collection / Colposcopy /Cryo Cautery / Electrocautery / HSG.

iii) Family Planning

- Counselling for contraception / Sterilization / IUCD insertion / Removal.

iv) Labour-room

- History and work up of all cases. Examination of all patients and documentation
- Sending investigations and filing investigation forms.
- Performing NST, Maintaining partogram in in labouring patients.
- Monitoring vitals, uterine contractions and fetal heart rate in labouring patients , conducting deliveries,
- Episiotomy stitching and neonatal resuscitation.
- I/V Line insertion, RT insertion, Catheterization, preparation of oxytocin

drip, instillation of misoprostol or prostaglandine gel for induction of labour.

- Management of sick patients including those with Eclampsia, Abruption and PPH
- Preparation of discharge summary
- Preparation of monthly and annual statistics.

v) **Indoor**

- History and work up of all Antenatal cases
- Work up of all admitted high risk obstetric cases
- Care of post partum patients
- Advise to post partum patients regarding breast feeding, immunization of baby and contraception.
- History and workup of all gyne cases, examination of all patients, sending investigations
- Pre operative assessment and preparation of all patients for surgery
- Aseptic dressing, suture removal of post operative patients

vi) **Operation Theatre**

- Performing minor procedures like D&C, MTP, Endometrial biopsy, Cervical biopsy, Cryo Cautery, Electro cautery etc.
- Assisting all major Obstetric and Gynecologic operations