CURRICULUM



MASTERS IN GYNAECOLOGY & OBSTETRICS DEPARTMENT OF GYNAECOLOGY & OBSTETRICS

Peoples University of Medical & Health Sciences, Nawabshah, Sindh.

INTRODUCTION

Pakistan is developing country and has a very high maternal mortality and infant mortality. The challenge of reducing these high mortality rates is very big.

Care of women, both pregnant and no pregnant; depends upon a number of factors 'mainly awareness amongst the masses, literacy and financial support. Provision of timely and proper care saves the lives of both mother and child. In order to provide better trained "Healthcare Providers".

The Peoples University of Medical & Health Sciences is running 04-year degree course (MS) in the field of Gynaecology and Obstetrics.

- The curriculum that will be based upon the structured training program to ensure that the knowledge, skills and competencies of graduates of these programs of university will meet the minimum requirements and standards.
- > To conduct research in Gynae & Obs problems specific to our region and find their solution.
- The students should acquire knowledge beyond textbooks, visit libraries and worldwide web (www).

SCOPE OF THE COURSE

After achieving degree of M.S in Gynae and Obs, the doctors can be inducted as Assistant Professor in Medical Universities / Medical Colleges and Consultant at District Hospital.

G.I.O (GENERAL INSTRUCTIONAL OBJECTIVES)

After completing the training in Gynae & Obs, a trainee shall be able to:

- Discuss etiology, pathogenesis, epidemiology and management of disorders in Gynae & Obs.
- Show initiative, become life long self directed learners tapping on resources including clinical material, faculty, online learning programs and library.
- Discuss principles of basic sciences as applied to Gynaecology and Obstetrics like haemorrhage, blood transfusion, shock, sterilization of instruments, infection, antibiotics, inflammation, repair and healing.

P.G. CURRICULUM

MASTERS (M.S) IN GYNECOLOGY & OBSTETRICS

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PG CURRICULUM

MASTERS (M.S) IN GYNECOLOGY & OBSTETRICS

1) Goals

The goal of MS course in Obstetrics & Gynaecology is to produce a competent Obstetrician & Gynecologist who:

- Recognizes the health needs of adolescents, females in reproductive age group & post menopausal females & course out professional delegations in keeping with principles of National Health Policy and professional ethics.
- ❖ Is competent to manage the pathological states related to reproductive system with knowledge of Anatomy, Physiology, Pharmacology & Pathophysiology.
- ❖ Is aware of contemporary advances & developments in the field of maternal health & other related issues.
- Is oriented to principles of research methodology.
- Has acquired skills in educating medical and paramedical professionals.

2) Objectives

At the end of the MS course in Obst. & Gynae, the student should be able to:

- Provide quality maternal care in the diagnosis and management of Antenatal, Intra-natal & Post natal period of normal and abnormal pregnancy.
- Provide effective & adequate care to the obstetrical and early neonatal emergencies.
- Provide counseling & knowledge regarding family planning methods & perform medical termination of pregnancy.
- Organize & implement maternal components in the "National Health Programs".
- ❖ Develop adequate surgical skills to manage common Obstetrical & Gynaecological problems.
- Medical genetics Elementary genetics as applicable to obstetrics.
- Normal & Abnormal pregnancy during Antenatal, Intra-natal & Post-natal.
- Gynaecological Endocrinology & Infertility knowledge.
- Benign & malignant Gynaecological disorder.

- Operative procedures including Endoscopy (Diagnostic & Therapeutic) & its related complications.
- Knowledge of interpretation of various laboratory investigations & other diagnostic modalities in Obstetrics & Gynaecology.
- Medical & Surgical problems and Anesthesiology related to Obstetrics & Gynaecology.
- * Knowledge of essentials of Pediatric & Adolescent Gynaecology.
- * Reproductive & Child Health, Family Welfare & Reproductive tract infections.
- STD & AIDS & Government of Pakistan perspective on women's health related issues.
- ❖ Demonstrate skills in documentation of case details and of morbidity & mortality data relevant to the assigned situation.
- Knowledge of medico legal aspects in Obstetrics & Gynaecology.
- ❖ Be familiar with research methodologies & use of newer information technologies.
- ❖ Keep abreast with advances in the field of Obstetrics & Gynaecology.
- Facilitate learning of medical / nursing students, para medical health workers as a teacher trainer.
- Demonstrate empathy & humane approach towards patients and their families.
- Function as a productive member of a team engaged in health care, research & education.

3) Syllabus

3.1) Theory

Obstetrics

- Gametogenesis fertilization, implantation and early development of embryo
- Normal Labour
- 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.
- ❖ Puerperium Normal
- Malpresentation & malposition of labour
- ❖ Abnormal Puerperium
- CPD & its management
- ❖ Complications of 3rd stage of labour
- Hypertensive disorders in pregnancy
- Antepartum Hemorrhage
- * PROM, Polyhydramnios, Oligo Hydramnios
- ❖ Obstetrical Hemorrhage (includes Antenatal & postpartum)
- Hypertensive disorders of pregnancy
- Medical disorders in pregnancy
- Emergency Obstetric Care (Intensive Obstetrics)
- Antepartum & intrapartum fetal monitoring.

❖ Gynaecology

- Normal and abnormal microbiology of genital tract & bacterial, viral & parasitic infections responsible for maternal fetal & Gynae disorders.
- 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, Adenomyosis
- Endocrine abnormalities, Menstrual abnormalities Amenorrhoea, PCOD, Hirsutism, Hyperprolactinemia, Thyroid disorders.
- Laparoscopy & Hysteroscopy
- Ca Cervix
- ❖ Ca Endometrium
- Carcinoma Ovary

- Menopause
- Genital Fistulae / Urinary Incontinence
- Prolapse
- Contraception / Family Planning / Sterilization methods

1 1

- Endometriosis, Adenomyosis
- . Infertility.

3.2) Practical

Obstetrics

- Venepuncture
- ❖ Amniotomy/
- Conduct of normal Vaginal delivery
- Perineal infilteration & 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
- Amnio infusion
- Instillation of extr4a amniotic & intra amniotic drugs
- Non stress Test
- Suction Evacuation
- Dilatation & Evacuation

- Repair of complete perineal tear
- * Repair of cervical tear
- Caesarean Hysterectomy
- Internal iliac ligation
- Uterine & 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 Curettage / Polypectomy
- Cervical Biopsy
- Cryo / Eclectrocautery of Cervix
- Hystero Salpingography
- Diagnostic Laparoscopy & Hysteroscopy
- Opening & Closing of abdomen
- Operations for utero vaginal prolapse
- Operations for Ovarian tumors
- Operations for Ectopic Pregnancy
- Vaginal Hysterectomy
- ❖ Abdominal Hysterectomy
- Myomectomy
- Colposcopy
- Loop Electro Surgical Excision Procedure
- Tuboplasties
- Paracentesis
- Culdocentesis

Endoscopic Surgery (Operative Laparoscopy & Hysteroscopy)

PA

- · Repair of genital fistulae
- Operations for Urinaryincontinence
- * Radical operations for Gynaecological Malignancies
- Vaginoplasty
- * Intrauterine insemination
- Basic ultrasound / TVS
- Hydotubation
- Vulval Biopsy
- Incision & drainage

❖ FAMILY PLANNING

- Intera Uterine Contraception Device Insertion / removal
- * Female sterilization
- Open & Laparoscopic
- **❖** MVA
- ❖ Male Sterilization
- Imlanon Insertion

3.3) Clinical Skills

By the end of the Postgraduation, trainee should be able to do:

- Minor Procedures Like:
 - Cu-T insertion
 - ➤ MVA, D&C, EB, Cx biopsy, Cryocautery, Drainage of pyometra, evacuations
- Endoscopic Procedures Like
 - > Diagnostic Laparoscopy, Hysteroscopy, Laparoscopic tubal ligation
- ❖ Vaginal deliveries, assisted breech vaginal deliveries, Outlet & Mid cavity
 - > Forceps application, Ventouse, Stitching of 3rd degree perineal tears.
- ❖ L. S. C. S
- Laparotomy for ectopic pregnancy or Ovarian cysts
- Uncomplicated Total Abdominal Hysterectomies

Vaginal Anterior and Posterior Repair

4) Syllabus

4.1) General Principles

Acquisition of 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 emanating from clinical and academic work. The formal sessions are meant to supplement this core effort.

4.2) Teaching Session

- Clinical case discussions:
 - > PG Bed side
 - > Teaching rounds
- Seminars / Journal Club
- Statistical meetings: Weekly./ monthly
- Mortality meetings
- Interdepartmental Meetings: Pediatrics, Radiology
- ❖ Others Guest Lectures / Vertical Seminars / Central Stat Meets

4.3) Teaching Schedule

Journal club	\rightarrow	Once a week
Seminar/Syposium	→	Once a week
PG case discussion/Bed side teaching	→	Once a week
1st Monthly Statistics & Intradepartment meet	→	Once a month
(with all the staff, incharge, residents & faculty)		
2nd & 3rd Interdepartmental meet	→	Once a week
(Endocrinology, Medicine, Cardiology, Transfusion Medic	cine,	
Pathology, Microbiology, Gastroenterology, Anaesthesia)		
4th Perinatology meet with department of Obstetrics and	→	Once a week
Gynae including statistics discussing any neonatal death/to	pic	

Thesis meet to discuss thesis being done by the PG residents Once a week > Grand round of the wards Once a week Interdepartmental meet with the Radiology department Once a week -Grand round of the ward Once a week Central session (CPC, guest lectures, integrated student -> Once a month seminars, grand round, sessions on basic sciences, biostatistics, research methodology, teaching methodology, health economics, medical ethics and legal issues).

5) Postings

- Emphasis should be self-directed learning, group discussions, case presentations & practical hands on learning. Student should be trained about proper history taking, clinical examination, advising relevant investigations, their Interpretations and instituting medical surgical management by posting the candidates in OPD, specialty clinics, wards, operation theatres, labour room, family planning clinics & other departments like neonatology, radiology, anesthesia. The candidates must be trained to manage all emergency situations seen frequently.
 - Gynae Ward
 - > Labour-room
 - > Emergency
 - > Family Planning
 - Gynae OT

6) Assessment

All the PG residents are assessed daily for their academic activities and also periodically.

6.1) General Principles

- The assessment is valid, objective, and reliable.
- It covers cognitive, psychomotor and affective domains.
- Formative, continuing and summative (final) assessment is also conducted. In addition, thesis is also assessed separately.

6.2) Formative Assessment

The formative assessment is continuous as well as periodical. The former is to be based on the feedback from the senior residents and the consultants concerned. Assessment is held periodically. Formative assessment will not count towards pass/fail at the end of the program, but will provide feedback to the candidate

6.3) Internal Assessment

❖ The performance of the Postgraduate student during the training period should be monitored throughout the course and duly recorded in the log books as evidence of the ability and daily work of the student. Marks should be allotted as followed:

P A

Sr. No.	Items	Marks	
1.	Personal Attributes	Y <u></u>	
2.	Clinical Work		
3.	Academic activities		
4.	End of term theory examination		
5.	End of term practical examination	***************************************	

1. PERSONAL ATTRIBUTES

- ❖ Behavior and Emotional Stability: Dependable, disciplined, dedicated, stable in emergency situations shows positive approach.
- Motivation and Initiative: Takes on responsibility, innovative, enterprising, does not shirk duties or leave any work pending.
- ❖ Honesty and Integrity: Truthful, admits mistakes, does not cook up information, has ethical conduct, exhibits good moral values, loyal to the institution.
- Interpersonal Skills and Leadership Quality: Has compassionate attitude towards patients and attendants, gets on well with colleagues and paramedical staff, is respectful to seniors, has good communication skills.

2. CLINICAL WORK:

- Availability: Punctual, available continuously on duty, responds promptly on calls and takes proper permission for leave.
- ❖ Diligence: Dedicated, hardworking, does not shirk duties, leaves no work pending, does not sit idle, competent in clinical case work up and management.
- * Academic ability: Intelligent, shows sound knowledge and skills, participates adequately in academic activities, and performs well in oral presentation and departmental tests.
- ❖ Clinical Performance: Proficient in clinical presentations and case discussion during rounds and OPD work up. Preparing Documents of the case history/examination and progress notes in the file (daily notes, round discussion, investigations and management) Skill of performing bed side procedures and handling emergencies.

3. ACADEMIC ACTIVITY:

- Performance during presentation at Journal club/ Seminar/Case discussion/ Stat meeting and other academic sessions.
- Proficiency in skills as mentioned in job responsibilities.

4. END OF TERM THEORY EXAMINATION

Conducted at the end of 4th year.

5. END OF TERM PRACTICAL/ORAL EXAMINATIONS

Conducted at the end of 4th year.

Marks for **personal attributes** and **clinical work** should be given annually by all the consultants under whom the resident was posted during the year.

Marks for academic activity should be given by the all consultants who have attended the session presented by the student. The Internal assessment should be presented to the Board of examiners for due consideration at the time of Final Examinations.

6.4) Summative Assessment

- A Ratio of marks in theory and practical will be equal.
- ❖ The pass percentage will be 50 %.
- Candidate will have to pass theory and practical examinations separately.

A) THEORY EXAMINATION

> PAPER-I

■ BCQs

100 Questions

(Obs → 50, Gynae → 50)

> PAPER-II

Long Essay Questions

04

> PAPER-III

Short Essay Questions

04

B) PRACTICAL EXAMINATION

➤ Long Cases

02

(Obs → 01, Gynae → 01)

> OSPE

7) Job Responsibilities

- ❖ OPD: History & Work up of all cases and presentation to the consultants.
 - This includes all the special clinics including infertility, endocrinology, oncology, Menopause and Adolescent clinic.
 - > Documentation in OPD Card, register completion and maintenance.
- Minor Procedure: Aseptic Dressings / Stitch removal / Pap smear collection / Colposcopy / Cryo Cautery / Electrocautery / HSG.
- Family Planning: Counselling for contraception / Sterilization / IUCD insertion / Removal.
- * Indoors
- ❖ Labour-room / L-room Recovery
 - > History & work up of all cases.
 - > Examination of all patients and documentation in the files.
 - > Sending investigations & 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 Synto drip, instillation of misoprostol or Cerviprime for induction of labour.
- > Management of sick patients including those with Eclampsia, Abruption & PPH
- > Assessment & shifting of sick patients to ICUs.
- Completion of files
- > Preparation of discharge summary
- > Preparation of weekly, monthly and annual stats.

* Post Partum & Gynae Ward / Recovery

- > Care of post partum patients
- > Advise to post partum patients regarding breast feeding, immunization of baby & contraceptive advise to mother.
- > History and workup of all gynae cases, examination of all patients, sending investigations and filling forms
- > Pre operative assessment and preparation of all patients before surgery
- Aseptic dressing, suture removal

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- ➤ Performing minor procedures like D&C, MVA, Endometrial biopsy, Cervical biopsy, Cryo Cautery, Electro cautery etc.
- > Assisting major procedures listed above.

❖ Indoor: (Labour-room, Recovery, Ward & Emergency)

- Supervision of work
- > Performing difficult procedures
- > Checking patient record files, registers, discharge summaries
- > Checking treatment charts
- > Conducting normal, complicated, and instrumental deliveries
- Performing LSCS in Low Risk patients
- > Performing all minor Obstetrics & Gynaecological procedures

- Management of sick patients, CPR, declaration of death and completion of death file
- > Performing major surgery i.e. Hysterectomy and Laparotomy
- > Critique for mortality case discussions
- > Liaison with other departments for cross consultations
- > Sending Family Planning reports
- Supervisor annual stat
- > Rotational duties in Labour-room, Emergency, OPD & OT.
- > Attending to Emergency calls from other departments
- Initial work up and management of all patients coming to emergency.

8) Suggested Books and Journals

8.1) Books

- Williams Obstetrics 22nd ed.
- Text book of Obstetrics by Dutta DC
- ❖ Practical guide to High Risk Pregnancy and delivery 3rd ed. 2008 Arias Fernando
- Shaw's Text book of Gynaecology
- Novak's Gynaecology
- Jeffcoate's Principles of Gynaecology 7th ed.
- Medical Disorders in Pregnancy by Barnes
- Medical Disorders in Pregnancy by FOGSI
- Care of the Newborn 6th ed. Meharban Singh
- USG in Obst. & Gynaecology by Callens
- USG in Obst. & Gynaecology by Kuldeep Singh
- ❖ Te Linde's Operative Gynaecology 10th ed.
- Bonneys's Gyn Surgery 10th ed.
- Shaws Operative Gynaecology
- Obstetrics Rashid Latif
- Gynaecology Rashid Latif
- Obs & Gynae Arshad Chohan

- Dewhurst's Textbook of Obs & Gynae
- ❖ Oxford Handbook for Obstetrics & Gynaecology
- ❖ Practice of fertility control 7th ed. Chaudhary S.K.
- ❖ Text book of Gynae contraception 14th ed. C.S. Dawn
- Year book of Obst. & Gynae
- * Principles & Practice of Colposcopy by B. Shakuntala Baliga
- Laparoscopy & Hysteroscopy by Sutton
- ❖ Gynae & Obst. Procedures Parulikar S.V.
- Surgery in infertility & Gynaecology Jain Nutan
- ❖ Principles & Practice of Colposcopy Balya B.S.
- ❖ Infertility Manual Rao Kamini A.
- ❖ Operative Laparoscopy Soderstrom R
- Chemotherapy of Gynaecological Malignancies Borker C
- Ten Teachers Obstetrics
- * Ten Teachers Gynaecology

8.2) Journals

- Pakistan Journal of Obstetrics & Gynaecology
- ❖ British Journal of Obstetrics & Gynaecology
- ❖ American Journal of Obst. & Gynae
- Clinics of North America
- * Recent Advances in Obst. & Gynaecology by John Bonnar
- Progress in Obst. & Gynae by Studd.
- Clinics of Obst. & Gynaecology
- ❖ Journal of College of Physicians & Surgeons Pakistan

9) Duration of Course and Teaching Strategies

❖ M.S → 04 Years Course

➤ Total Duration → 04 Academic Years

➤ One academic year → 48 weeks

➤ Four academic year → 192 weeks

➤ Initial 12 weeks basic health sciences → 12 weeks

➤ Rotation in other clinical fields → 06 months

➤ Lectures (Instructions) → 20 % Time

➤ Seminars (Discussions) → 10 % Time

➤ Practical Training Hospital
 → Supervised Self Learning
 → 10 %

➤ Formative evaluation → Every six months

➤ Summative evaluation → At the end of Program

DETAILED TRAINING PROGRAMME OF M.S

IST YEAR

	Obstetrics		Gynaecology	
7	History Taking	>	History Taking	
A	General and Systemic Examination	>	General and Systemic Examination	
2	Diagnosis and Management of Normal	>	Pelvic Examination and Speculum	
	Pregnancy and Medical Disorders like	v /	Examination	
	PIH, Eclampsia, Diabetes, Cardiac	>"	Take Cervical Šmear	
	Disease, Anaemia, Thyroid Disease and	>	Taking High Vaginal Swab	
	Epilepsy	>	Insertion of IUCD	
>	NVD /	>	Observe and Interpret Ultrasound	
Þ	NVD with Episiotomy		Findings	
>	ARM	>	Management of:	
>	Postoperative, Postpartum Management		o Threatened Abortion	
	of Patients		o Incomplete Abortion	
>	Assist Cesarean Section		o Missed Abortion	
>	Opening and Closure of Abdomen		o DUB	
۶	Attend Antenatal Clinic, Vaccination		o Fibroid Uterus	
	Centre and Lactation Management		o UV Prolapse	
	Clinical	>	Attend Gynae Clinic	
>	Neonatal Care	>	Family Planning Clinic	
	o Examination	A	Assist Major Gynaecological Surgical	
	o Resuscitation		Procedures	
>	Maintain Logbook dully signed by	A	Perform Minor Procedure under	
	Registrar on Duty and Countersigned		Supervision	
	by Supervisor	Þ	Maintain Logbook dully signed by	
			Supervisor	

DETAILED TRAINING PROGRAMME OF M.S

2nd YEAR

	Obstetrics		Gynaecology
>	Perform CG, Obstetrical Ultrasound	>	Perform D & C, D & E, Polypectomy,
2	C/Section under Supervision – 15 cases		Cautery Cervix
2	Independent C/Section – 35 cases	>	Assist Major Surgery
2	Vacuum Delivery	2	Assist Manchester Repair
	o Under Supervision – 05 Cases	>	Perform Laparotomy under Supervision
	○ Independent – 05 Cases		for Ectopic Pregnancy and Simple
2	Forcep Delivery		Ovarian Cyst
	 Under Supervision – 05 Cases 	7	Perform Tubal Ligation
Ī	o Independent – 05 Cases	>	Perform cervical Cerclage
>	Repair of cervical and Perineal Tear	>	Perform Marsupalization for Bartholin
2	Deal with Obstetric Emergencies like		Cyst Excision and Drainage of
	Shoulder Dystocia		Imperforated Hymen
>	Assist cesarean Hysterectomy	>	Attend Family Planning Clinic
A	Attend Lactation Management Clinic	>	Perform Gynaecological Ultrasound
	and Family Planning Clinic		

DETAILED TRAINING PROGRAMME OF M.S

3rd YEAR

Obstetrics			Gynaecology		
P	Cesarean Hysterectomy	>	Abdominal Hysterectomy		
A	B-Lynch Suture	>	Vaginal Hysterectomy		
Þ	Repair of Rupture Uterus	>	Manchester Repair	•	
×	Repair of 3 rd and 4 th Degree Perineal	A	Myomectomy		
	Tears	>	Tubal Ligation		
		>	Laparoscopy		