



# المجلس العربي للاختصاصات الصحية

## The Arab Board of Health Specializations

دليل برنامج الولادة وأمراض النساء  
المجلس العلمي لاختصاص الولادة وأمراض النساء

**Obstetrics and Gynecology Program Guide**  
**The Scientific Council of Obstetrics and Gynecology**

May 2022

## **1. Overall Educational Objectives of the Program:**

The overall goals and objectives of the program are summarized as follows:

1. To provide an optimum learning environment in which each trainee will acquire the knowledge, skills and attitude in the field of woman's health and reproduction.
2. Trainees completing the program will gain, the medical and surgical knowledge in prevention, diagnosis and management of a broad range of conditions affecting the women's health.
3. Trainees completing the program will be able to provide their societies with high quality clinical care in the field of the specialty.
4. Trainee completing the program will be able to work as general specialist in the field of obstetrics and gynecology or to continue and expand their education in the subspecialty.
5. Trainees at the end of the program will be able to contribute to research.
6. Trainee completing the program will have self-evaluation and learning skills in the areas of problem-solving, evidence based medicine, and critical appraisal at a level to ensure that they remain effective clinicians, teachers and investigators throughout their careers.
7. Professional ethics: all trainees in the program should comply with medical professional code of ethics, and the medical law of the training country, understanding and acceptance of

- ethical principles towards their patients and colleagues regarding respect, honesty and confidentiality.
8. Teaching: Senior trainees are expected to teach junior trainees, medical trainees and nurses.
  9. Critical appraisal: The trainee must have an understanding of the basic biostatistical and clinical epidemiological principles necessary for critical evaluation of the medical literature, specially in the aspects of causation, prevention, diagnosis, prognosis and therapy: Each trainee will be responsible for attend clinical rounds that demonstrate critical appraisal skills.
  10. Quality Improvement and Audit: The trainees must understand the value and application of various approach to quality improvement participate in a medical audit process or serve a Quality Assurance Committee.
  11. Equity: Trainees must demonstrate the knowledge, skills and attitudes relating to gender, culture and ethnicity pertinent to Obstetrics and Gynecology.

## **Program admission requirements:**

- 1 - Familiarity with the Arabic language.
- 2- The trainee must be of a healthy fit commensurate with the nature of the specialization, according to the assessment of the training center.
- 3-Obtaining the certificate in general medicine from a university recognized by one of the members of the Arab Board.
- 4- Spend a period of rotation (internship) for one year before or after graduation according to the approved system of the internship program in the country.
- 5- Provide proof of registration for training in a training center accredited by the Arab Board as a trainee in the specialty, graduated in responsibility during the entire period of the training program for the specialization.
- 6- Provide evidence of having the right to professional practice in the training center according to the country's regulation.
- 7- Submit the application for registration for training, accompanied by the required documents, according to the registration procedures announced through the website of the Arab Board, on the specified dates directly or through the local authority, as followed in each country.
- 8- Paying the registration fees and undertaking to pay the prescribed financial fees for training, exams, certificates or any other services on time.

## **Program Duration: 5 years**

## 1. Basic sciences

### The syllabus for the part 1 Arab Board

#### **1- Anatomy:**

Comprehensive knowledge of regional anatomy of the pelvis, abdomen, thorax, breast, thigh, endocrine glands, hypothalamus, spinothalamic tracts and meninges. Detailed knowledge of relevant bones, joints, muscles, blood vessels, lymphatics, nerve supply and histology. Basic understanding of cell structure and function.

#### **2- Embryology:**

Comprehensive knowledge of gametogenesis and fertilization, of organogenesis and the development of the embryo in all body systems, of the development of placenta, membranes and amniotic fluid and of structural changes in the newborn.

#### **3- Physiology:**

Comprehensive knowledge of human physiology with particular reference to the male and female reproductive systems, pregnancy, the fetus and the neonate. Quantitative information about common physiological activities. Understanding of the principles of nutrition, water, electrolyte and acid-base balance and cell biology.

#### **4- Endocrinology:**

Comprehensive knowledge of all hormones and humoral agents (both sexes) including their chemistry, formation from precursors, storage, release, transport, mode and site of action, regulation and distribution in all body compartments as well as their physiological and pathological activities.

**5- Pathology:**

Comprehensive knowledge of general pathological principles including general, tissue and cellular responses to trauma, infection, inflammation, therapeutic intervention (especially by the use of irradiation, cytotoxic drugs and hormones), disturbances in blood flow, loss of body fluids and neoplasia. Detailed knowledge of common pathological conditions.

**6- Genetics:**

Understanding of the structure and function of chromosomes and genes. Knowledge of the principles of inheritance of chromosomal and genetic disorders. Detailed knowledge of common inherited disorders and of common fetal malformations.

**7- Biochemistry:**

Comprehensive knowledge of the metabolism of carbohydrates, lipids, proteins and nucleic acids, of the roles of vitamins, minerals, and enzymes and of the composition and regulation of intracellular and extra cellular fluids. Detailed knowledge of the processes involved in steroid genesis, placental function and maternal-fetal interactions

**8- Pharmacology:**

Comprehensive knowledge of the properties, pharmacodynamics, actions, interactions and hazards of drugs and anesthetic agents commonly used in the mother, fetus and neonate. Detailed knowledge the principles of teratogenicity and of prescribing during pregnancy and lactation.

**9- Microbiology:**

Comprehensive knowledge of the characteristics, recognition, prevention, eradication and pathological effects of all commonly encountered bacteria, viruses, Rickettsia, fungi, protozoa, parasites and toxins, including an understanding of the principles of infection control.

### **10- Immunology and hematology:**

Comprehensive knowledge of immune mechanisms, both cell-mediated and humorally mediated, and of the principles of reproductive immunology, graft-host interaction, immunization, immunosuppression, allergies and anaphylactic reactions.

### **11- Biophysics:**

Knowledge of the physical principles and biological effects of heat, sound and electromagnetic radiation. Understanding of the principles of laser, electrocardiography, isotopes, X-rays, ultrasound and magnetic resonance imaging.

### **12- Statistics and epidemiology:**

Understanding of commonly used terms and techniques. Interpretation of results of research investigations.

## **Syllabus for part II**

### **1. General obstetrics**

#### **a. Preconceptional care :**

The trainee must have the extensive knowledge and skills necessary to evaluate the woman's health before pregnancy including the principal function of reproductive system and other body organs, and rule out the contraindication of pregnancy

#### **b. Ante partum Care:**

The trainee must have the extensive knowledge and skills necessary to evaluate the health of mother and fetus, including

appropriate history taking and physical examination, provision of comprehensive ongoing ante partum surveillance, ability to identify deviations from normality, and the effective use of laboratory testing, imaging and non-stress testing. He/she will be able to implement appropriate management strategies where deviation from normal is identified.

The trainee must have a broad working knowledge of medical, surgical and psychosocial complications of pregnancy and their appropriate management, including timely consultation or transfer of care.

The trainees must have extensive knowledge of the pathophysiology, prevention, investigation, diagnosis and management of common obstetric complications at all stages of pregnancy including second trimester pregnancy loss, preterm labor, premature rupture of membranes, antepartum hemorrhage, gestational hypertension, multiple gestation, fetal growth restriction, isoimmunisation, dystocia, post-term pregnancy, and fetal death.

The trainees must be able to perform a limited diagnostic obstetric ultrasound scan for the purpose of ascertaining placental localization, fetal number, fetal presentation, and the level of fetal well-being, including viability.

### **c. Intra partum care:**

The trainee must have the extensive knowledge and skills necessary to conduct normal and complicated labor and delivery. He/she will be able to assess maternal and fetal health and progress in labor utilizing history and physical examination, intermittent auscultation, electronic fetal monitoring, basic ultrasound imaging and fetal scalp blood sampling.



The trainee must have extensive knowledge of techniques of induction and augmentation of labor, including indications, methodology, pharmacology, management and complications.

The trainee must have extensive knowledge and skills with respect to the mechanisms and techniques of spontaneous and assisted vaginal delivery. He/she will have the ability to identify situations requiring assisted delivery, and be able to appropriately perform forceps delivery, vacuum extraction, cesarean section, breech delivery, management of shoulder dystocia, repair of obstetric lacerations and vaginal birth after cesarean delivery.

The trainee will have the working knowledge and skills necessary to recognize abnormalities of the neonate. He/she must be able to carry out an appropriate physical examination of the newborn and know when to seek the resuscitation and stabilization of the newborn.

**d. Postpartum care:**

The trainee must have extensive knowledge of the puerperium and the skills necessary to provide postpartum care, including the recognition and management of early and delayed postpartum hemorrhage and sepsis, diagnosis management and prevention of thrombo-occlusive diseases, promotion of breast feeding, family planning, recognition of risk factors for depression and support in psychosocial adjustment.

**e. Adolescent gynecology**

That involves young females and their special needs in view of their physiological maturation and their reproductive organs and its effects on their bodies

**f. Menopause**

Dealing with physiological changes resulting from cessation of menstruation (natural or surgical) and its effects on a woman's body and health

## **2- General Gynecology**

### **a. Reproductive Physiology and Temporal Changes:**

The trainee must have an extensive knowledge of normal reproductive physiology and the changes that take place from birth to senescence.

The trainee must have a working knowledge of the pathophysiology, investigation, diagnosis, management and possible psychosocial ramifications of gynecologic problems in children and adolescents. These problems include developmental anomalies, precocious and delayed puberty, abnormal vaginal discharge and bleeding, sexual abuse, family planning, teenage pregnancy, and the medico-legal aspects of consent and confidentiality specific to this age group.

The trainee must have extensive knowledge of normal physiology and pathophysiology, investigation, diagnosis, and treatment in the areas of menstrual irregularity, amenorrhea, dysfunctional uterine bleeding, hormonal under activity and over activity, galactorrhea, hirsutism, and polycystic ovarian disease and premenstrual syndrome.

The trainee must have extensive knowledge of the changes associated with menopause and aging, and be able to provide appropriate periodic assessment and management including hormonal and non-hormonal modalities.

### **b. Family Planning:**

The trainees must have an extensive knowledge of methods of contraception including mechanisms of action, indications, contraindications, and possible complications. He/she must be able to inform women of options available to them and provide any required service (such as counseling in contraception, diaphragm

fitting, prescription of oral contraceptives, insertion of intrauterine device, and sterilization) or refer appropriately to meet the patient's needs.

**c. Gynecologic Infections:**

The trainees must have extensive knowledge of pathophysiology, investigation, diagnosis, and treatment in vaginal and vulvar infections, sexually transmitted diseases, gynecologic aspects of HIV and pelvic inflammatory disease.

**g. Other Non-Malignant Gynecologic Conditions:**

The trainees must have extensive knowledge of the underlying physiology, pathophysiology, investigation, diagnosis, medical and surgical treatment in the areas of pelvic support defects, pelvic masses, acute and chronic pelvic pain, endometriosis, abnormal uterine bleeding, and vulvar pain and dermatoses, Urinary Incontinence and pelvic floor dysfunction.

**h. Human Sexuality:**

The trainees must have the ability to identify problems related to sexual dysfunction including dyspareunia, vaginismus, inhibited sexual desire and anorgasmia, and be able to initiate management and/or referral and male sexual dysfunction.

**i. Breast Conditions:**

The trainees must have a working knowledge of the pathophysiology, diagnosis and management of benign breast disease, screening and referral for reproductive system.

**g. Medical and Surgical Diseases:**

The trainees will have a working knowledge of the important medical and surgical disorders that may have an effect on or be affected by the female reproductive system.

### **3- General surgery**

#### **A. Preoperative and Postoperative Patient Care:**

The trainee must have the extensive knowledge and skills necessary to provide appropriate preoperative and postoperative care, including recognition and assessment of preoperative risk factors, provision of nutritional support, promotion of wound healing, and management of medical and surgical complications

#### **B. General Gynecologic Surgery:**

The trainee must have extensive knowledge of the indications for and be skilled in the conduct of common gynecological procedures including vulvar, vaginal and cervical surgery for benign conditions, hysterectomy (abdominal and vaginal), myomectomy, adnexal surgery, abdominal exploration, identification and repair of operative complications, paracentesis, cystourethropexy, anterior and posterior colporrhaphy and evacuation of the pregnant uterus and uterine suspension operations.

The trainees must be able to discuss with the patient the risks, benefits, and complications of any surgical treatment, as well as non-surgical treatment alternatives.

#### **C. Laparoscopic and Hysteroscopic Surgery:**

##### Laparoscopic Surgery

The trainees must have an extensive knowledge of the indications for and be skilled in diagnostic laparoscopy, laparoscopic sterilization, needle aspiration of simple cysts, ovarian biopsy, lysis of adhesions, laser or diathermy treatment of endometriosis (stage 1 and 2), linear salpingotomy or salpingectomy for ectopic pregnancy.

## Hysteroscopic Surgery

The trainee must have an extensive knowledge of the indications for and be highly skilled in hysteroscopy for purposes of diagnosis, treatment of intrauterine synechiae, simple polyp removal of IUCD, and endometrial ablation. The trainee will require a working knowledge of more advanced laparoscopic and hysteroscopic techniques. He/she should know the indications for and limitation of laparoscopically assisted vaginal hysterectomy in comparison with vaginal and abdominal hysterectomy.

## 4- Gynecologic Oncology

### **a. Risk Factors**

The trainees must have extensive knowledge of known risk factors for gynecologic malignancy and of pre-malignant gynecologic conditions.

### **b. Screening**

The trainees must have extensive knowledge of the current guidelines and indications for screening for cervical, endometrial and ovarian cancer, and an understanding of the reliability of current screening methods.

### **c. Colposcopy**

The trainees will have a working knowledge of colposcopic technique and interpretation, the indications for and limitations of the procedure, and indications for referral for colposcopic assessment.

### **d. Vulvar Neoplasia**

The trainees will have the working knowledge and skills for diagnosis and staging, and for appropriate referral for treatment.

#### **e. Vaginal Neoplasia**

The trainees will have the working knowledge and skills for diagnosis and staging, and for appropriate referral for treatment.

#### **f. Cervical Neoplasia**

The trainees will have the working knowledge and skills for the management of benign and preinvasive lesions of the cervix using techniques such as LEEP, laser, cryotherapy and cone biopsy.

He/she will have a working knowledge of diagnosis, staging and appropriate surgical management (simple or radical hysterectomy) for cervical carcinoma. He/she will be able to refer appropriately for radical surgery, radiotherapy and /or adjuvant therapy.

#### **g. Endometrial and Uterine Cancer**

The trainees must have the extensive knowledge and skills necessary for diagnosis, staging and appropriate use of simple hysterectomy and bilateral salpingo-oophorectomy and node sampling in management of endometrial and uterine cancer. He/she will refer appropriately for more extensive surgery, radiation, and systemic therapy.

#### **h. Ovarian and Tubal Cancer**

The trainees must have the working knowledge and skills for diagnosis, and for appropriate referral for surgical staging, radiation chemotherapy, and other treatment modalities. He/she must be able to appropriately use the techniques of hysterectomy, salpingo-oophorectomy, omentectomy and debulking in this context.

#### **i. Gestational Trophoblastic Disease**

The trainees will have the working knowledge and skills necessary for diagnosis, primary intervention and follow-up. He/she will be able to carry out appropriate metastatic work-up and distinguish

low and high risk disease with appropriate referral for further assessment and treatment.

**j. Adjuvant Cancer Therapies**

The trainees will have a working knowledge of the principles and complications of adjuvant therapy, including an understanding of the indications for consultation with appropriate specialists.

**k. Palliative Care:**

The trainees will have a working knowledge of palliation in incurable gynecologic disease, including the social, ethical and legal implications of the various options.

**5- Reproductive Endocrinology / Infertility**

**a. Infertility:**

The trainees must have an extensive knowledge of factors contributing to infertility, enabling him/her to diagnose, evaluate and manage the major causes.

He/she will be able to utilize and interpret the tests and procedures commonly used in diagnosis, such as hormonal evaluation, semen analysis, basal body temperature charting, ovulation prediction, endometrial biopsy, hysterosalpingography and endoscopy.

The trainee will be aware of the effectiveness, and complications of current standard treatments as well as appropriate indications for subspecialty referral. The trainees must have the necessary knowledge for diagnosis and management of ovulatory disorders. He/she must have an extensive knowledge for situations requiring simpler regimens such as clomiphene citrate and progestogens and a working knowledge for more complex regimens utilizing GnRH analogues and gonadotropins.

The trainee must have a working knowledge of the surgical techniques used in treating tubal and pelvic causes of infertility, including pelvic adhesions, endometriosis, tubal obstruction and uterine malformations.

The trainees must have a working knowledge of the assisted reproductive technologies currently available, including appropriate indications for referral.

**b. Pregnancy Loss**

The trainees must have extensive knowledge of pathophysiology, investigation, diagnosis, and treatment in spontaneous abortion, ectopic pregnancy and recurrent pregnancy loss.

**6. Maternal-Fetal Medicine**

**a. Medical and Surgical Complications**

The trainees must have a broad working knowledge of medical, surgical and psychosocial complications of pregnancy and their appropriate management, including timely consultation or transfer of care. These conditions include: renal, cardiac, pulmonary, GI/hepatic, hematological, endocrine, and neuropsychiatric diseases as well as autoimmune and neoplastic conditions.

**b. Obstetric Complications**

The trainees must have extensive knowledge of the pathophysiology, prevention, investigation, diagnosis and management of common obstetric complications at all stages of pregnancy including second trimester pregnancy loss, preterm labor, premature rupture of membranes, ante partum hemorrhage, gestational hypertension, multiple gestation, fetal growth restriction, isoimmunisation, dystocia, post-term pregnancy, and fetal death.



### **c. Infectious Diseases**

The trainees must have extensive knowledge of the infectious diseases that commonly impact pregnancy as well as their pathophysiology, prevention, investigation, diagnosis and management and how they affect the developing fetus and newborn.

### **d. Fetal Diagnosis and Therapy**

The trainees must have a working knowledge of the techniques and procedures involved in prenatal genetics and fetal diagnosis and therapy including ultrasound, amniocentesis, chorionic villus sampling, cordocentesis, fetal transfusion and fetal drug therapy.

## **7- Imaging**

The trainee must have a working knowledge of the use ultrasound, and will have the skills to assess normal pelvic structures and identify abnormalities. The trainees must have a working knowledge of the indications for and limitations of other imaging modalities including CT and MRI scanning in the assessment of gynecologic lesions.

The trainees must have a working knowledge of the use of imaging techniques including ultrasound, and will have the skills to assess normal pelvic structures and identify abnormalities.

The trainees must have an extensive knowledge of the indications and technique for basic obstetrical ultrasound and tests of fetal well-being.

## **COMPETENCIES & Skills:**

The trainee through the program will gain an increasing responsibility in his practice, and will enhance his knowledge in basic science and clinical problems. During his years of training, he/she can communicate effectively with patients and families, gather essential and accurate information about their patients, for the purpose of problem identification. The trainee should be able to make informed decisions about diagnostic and therapeutic interventions based on patient's information and preference, up-to-date scientific evidence, and clinical judgment.

The trainee he/she should be able to perform competently all gynecology and obstetric procedures, considered essential for the management of the common health problem in his specialty, as well as counseling, education of the patient and their families. He/she should be able to use information technology to support patient care decisions and patient education. The trainees he/she be able to provide and advocate for health care services aimed at preventing problems or maintaining health.

During his training and after completion of the program, he/she should be able to work with health care professionals, including forms of the disciplines and profession, to provide patients, family and community care.

## **RESIDENCY PROGRAM**

### **First Year :**

- Orientation to hospital policies in regards to quality, protocols and hospital based guidelines...etc
- History and clinical examinations of all emergency and elective admissions to labor ward and general ward.
- Follow up of the labor ward cases under supervision of senior resident and specialist.
- Normal deliveries as well as performing episiotomy and repair.
- Morning and Evening round with senior resident and follow up of the inpatients and interpretation of the laboratory investigations.
- Assist senior doctors in caesarean sections and operative deliveries
- Evening rounds, look after the inpatients, and conduct the necessary investigations and prescribe medications under supervision of 4<sup>th</sup> or 5<sup>th</sup> year residents.
- Antenatal booking clinics, assessment of the first prenatal visit, estimation of low risk and high risk scorings under supervision of senior residents.

### **Second Year Duties:**

- Caring for women in labor ward, assessment of the high risk cases as well as all pregnancies complicated by medical disorders under supervision of senior residents
- Help first year residents in their performance.

- Assist in conducting twin deliveries.
- Assist in Performing cesarean sections with senior
- Performing minor gynecological procedures (such as dilatation and curettage, manipulation of Bartholin's gland, cervical cerclage, hysteroscopy...)
- Participating in examining patients, counselling them, advised contraception, prescribe medications, and order necessary investigations and complete maternal files.
- Participating in ultrasound in Obstetrics and Gynecology

### **Third year activities:**

- Supervision of the labor ward, obstetrics and gynecology ward.
- Participating in covering labor ward for difficult cases.
- Participating in Shoulder dystocia.
- Participating in Manual removal of the placenta under General Anesthesia.
- Participating in Cases of bleeding: Ante-partum hemorrhage – Postpartum hemorrhage.
- Performing cesarean sections under direct or indirect supervision
- Assessment of cervical pathology, and performs pap smears..etc.
- Participating in performing diagnostic laparoscopy and diagnostic Hysteroscopy
- Perform laparatomies for simple ovarian cystectomies and fibroid surgery and Hysterectomy for non-malignant indications, salpingectomies and salpingostomy procedures, Laparotomy or Laparoscopy under consultant supervision
- Supervising the other residents in the antenatal clinics, postnatal clinics, family planning as well as booking clinic and gynecology clinic.

### **Fourth year residency:**

- Illustrate leadership in the delivery room for assessing cases and communicating with the senior resident or specialist in Vacuum and forceps
- Assistance in major surgery.
- Participation in scientific research and scientific activities.
- Training in different sub-specialties
  - Diagnostic dilatation and curettage and diagnostic hysteroscopy, evacuation of hydatidiform mole and its follow up.
- Assessment of cervical and uterine malignancy and the necessary biopsies.

### **Fifth Year Duties:**

The residents are expected in this year to rotate in the different fields of subspecialties.

- Reproductive medicine
- Fetomaternal medicine
- Gyne- oncology
- Urogynecology
- Endoscopy surgeries (Laparoscopy- Hysteroscopy)

### **Teaching Activities:-**

Participating and attending the different activities in the department including:-

- Morning report to discuss all cases.
- Weekly Obstetric and Gynecology lectures.
- Weekly Journal Club.
- Every other week case presentation and or article review.
- Once monthly perinatal mortality meeting.
- Mortality and morbidity meeting

## **Subspecialty training programs**

- Reproductive medicine program has been established in 2021 for the duration of 2 years training.
- We are in the process in establishing the following subspecialty programs:
  - Feto-maternal medicine
  - Gyneoncology
  - Urogynecology
  - Endoscopy surgeries (Laparoscopy- Hysteroscopy)