

The University Of Jordan

**OBSTETRICS AND GYNAECOLOGY
RESIDENCY TRAINING PROGRAMME**



**SPECIALIST TRAINING PROGRAMME IN
Obstetrics And Gynaecology
(2013-2014)**

Five Years Residency Training Program

I. Mission Statement

The mission of the programme is to train specialists in obstetrics and gynecology who are highly capable and confident in managing the complete spectrum of conditions that arise in the area of women's reproductive health care, humanely and with the highest of ethical standards and integrity. These specialists will contribute to the community in the areas of education and research as well providing excellent clinical care.

II. Goals and Objectives

The goals and objectives of the programme reflect the Mission Statement above and will be elaborated on further in Section III below.

The goals and objectives may be summarized as follows. The physicians completing the programme will have special education and expertise in the field of women's health and reproduction and leadership skills in these area as well as in health care delivery, education and research possess medical, surgical and obstetrical knowledge and skills for the prevention, diagnosis and management of a broad range of conditions affecting women's reproductive and gynaecological health be capable of independently providing high quality clinical care and education in normal and complicated obstetrics and gynaecology be able to contribute to research 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

III. Educational Objectives

At the end of the training, the graduate will have achieved the following competencies of a specialist obstetrician and gynaecologist:

Medical Expert

Consultants will possess a defined body of knowledge and procedural skills, which are used to collect and interpret data, make appropriate clinical decisions, and carry out diagnostic and therapeutic procedures within the boundaries of their discipline and expertise. Their care is characterized by up-to-date (and whenever possible evidence-based), ethical, and cost-effective clinical practice and effective communication in partnership with patients, other health care providers, and the community. The role of medical expert/clinical decision maker is central to the function of the specialist clinician.

The resident in Obstetrics and Gynaecology is required to develop diagnostic and therapeutic skills for the ethical and effective care of patients with obstetrical/gynaecological-related health problems through:

Exposure to a wide variety of generalist and specialist rotations.

A process of graded responsibility as trainees proceed through their core years, with trainees assuming more patient-care and triage responsibility in their more senior years.

The development of skills in history-taking and physical examination.

The development of skills necessary for the development of an integrated differential diagnosis and a treatment plan for the patient.

The use of evidence-based medicine in effective decision-making strategies

The learning of a variety of core procedures pertaining to the practice of obstetrics and gynaecology.

Adequate exposure to in-patients through hospital-based rotations and out-patients through hospital-based ambulatory rotations.

The integration of basic and clinical sciences and how they apply to patient care.

The understanding of epidemiological principles and how they apply to patient care.

(See the section under “Syllabus” for more details)

Communicator

In order to provide humane, high-quality care, consultants establish effective relationships with patients, other physicians, and other health professionals. Communication skills are essential for the functioning of a specialist, and are necessary for obtaining information from, and conveying information to, patients and their families. Furthermore, these abilities are

critical in eliciting patients' beliefs, concerns, and expectations about their illnesses, and for assessing key factors impacting on patients' health.

A resident obstetrician and gynaecologist will

Establish effective relationships with patients and their families

Interact with community care-givers and other health resources to obtain and synthesize relevant information about the patient.

Develop a discharge plan for hospitalized patients and learn to involve the family physician, home care and other care-givers in the development of long-term community health planning

Learn to communicate effectively and efficiently with colleagues both verbally and through written records (ie. the medical record, discharge summaries, consultation notes).

Collaborator

Consultants work in partnership with others who are appropriately involved in the care of individuals or specific groups of patients. It is therefore essential for consultants to be able to collaborate effectively with patients and a multidisciplinary team of expert health professionals for provision of optimal patient care, education, and research activities.

A resident obstetrician and gynaecologist will

Know when to consult other care-givers appropriately.

Work with the interdisciplinary team to develop appropriate diagnostic and therapeutic strategies for patient care.

Work with the interdisciplinary team for and discharge planning.

Manager

Consultants function as managers when they make everyday practice decisions involving resources, co-workers, tasks, policies, and their personal lives. They do this in the settings of individual patient care, practice organizations, and in the broader context of the health care system. Thus, consultants require abilities to prioritize and effectively execute tasks through teamwork with colleagues, and make systematic and rational decisions when allocating finite health care resources. As managers, consultants take on positions of leadership within the context of professional organizations and the health care system.

A resident obstetrician and gynaecologist will

- Utilize resources to effectively balance patient care and health care economics.
- Understand the interplay between governments and the health care sector in allocating finite health care resources.
- Work to develop effective and efficient patient management strategies by:
 - Avoiding duplication of services
 - Involving other caregivers
 - Obtaining appropriate patient information from other health care sources
 - Appropriate use of information technology.
- Learn to effectively delegate responsibility to junior house staff.

Health Advocate

Consultants recognize the importance of advocacy activities in responding to the challenges represented by those social, environmental, and biological factors that determine the health of patients. They recognize advocacy as an essential and fundamental component of health promotion that occurs at the level of the individual patient, the practice population, and the broader community. Health advocacy is appropriately expressed both by the individual and collective responses of specialist physicians in influencing public health and policy.

A resident obstetrician and gynaecologist will

Identify important determinants of patients' health.

Work to develop effective preventive medicine strategies for patients.

Intercede on behalf of their patients as the patient weaves his/her way through complex health care institutions and services.

Recognize and respond to those issues where advocacy is important.

Scholar

Consultants engage in a life-long pursuit of mastery of their domain of professional expertise. They recognize the need to be continually learning and model this for others. Through their scholarly activities, they contribute to the appraisal, collection, and understanding of health care knowledge, and facilitate the education of their students, patients, and others.

A resident obstetrician and gynaecologist will

- Develop and implement an effective long-term learning strategy.
- Attend academic half day to develop learning skills in evidence-based medicine, medical ethics, physical examination skills, acquisition of medical knowledge

Attend other available rounds to enhance learning

Develop effective teaching strategies to teach more junior house staff.

Facilitate teaching of patients about their health problems directly or through the involvement of other professionals.

The furthering of new knowledge through participation in research projects under the supervision of knowledgeable faculty.

Professional

Consultants have a unique societal role as professionals with a distinct body of knowledge, skills, and attitudes dedicated to improving the health and well being of others. Consultants are committed to the highest standards of excellence in clinical care and ethical conduct, and to continually aspiring to mastery of their discipline.

A resident obstetrician and gynaecologist will

Develop an ethical framework for the delivery of the highest quality care.

Understand professional obligations to patients and colleagues.

Exhibit appropriate personal and interpersonal professional behaviours.

Act with integrity, honesty and compassion in the delivery of the highest quality health care.

Administrative Structure

A. Programme Director

The Programme director is responsible for the overall conduct of the Residency Programme. The Residency Programme Director is responsible to the Director of Medical Education Department and to the Head of Academic Affairs.

Responsibilities of the Programme Director

The responsibilities of the Program Director, assisted by the Residency Programme Committee include:

- Development and operation of the Programme such that it meets the standards of accreditation for a specialty program in EM
- Selection of candidates for admission to the program

- Evaluation and promotion of residents in the program in accordance with policies approved by the Postgraduate Medical Education Committee.
- Maintenance of an appeal mechanism. (see description of Appeal Mechanism)
- Establishment of mechanisms to provide career planning and counseling for residents and to deal with problems such as those related to stress in collaboration with the Residents Affairs
- An ongoing review of the Programme to assess the quality of the educational experience and to review the resources available in order to ensure that maximal benefit is being derived from the integration of the components of the program. This review must include:
 - an assessment of each component of the Programme to ensure that the educational objectives are being met
 - an assessment of resource allocation to ensure that resources and facilities are being utilized with optimal effectiveness
 - an assessment of the teachers in the Programme

Further to those responsibilities listed above, the Programme Director must function as a resident advocate and aid in the organization of other educational opportunities. The Program Director is responsible for assigning residents their rotation and service schedules. The Programme Director is responsible to the residents to train them well in a humane atmosphere.

VI. Entry Requirements

Prospective candidates:

Should have successfully completed basic medical training leading to MBBS, MD, or MBCh from a recognized institution.

Must have completed a one year internship programme that included at least two months of Obstetrics and Gynaecology. (The candidate may be required to complete a period of internship in Obstetrics and Gynaecology before commencing the Residency Programme if their internship experience did not include Obstetrics and Gynaecology.)

All candidates will sit for an entry exam and a personal interview.

Duration of Programme

The duration of the Programme is five years of formal supervised training. The resident would have successfully challenged the Arab Board and the RCOG membership examinations by the end of the fourth year. Residents may start applying for overseas fellowship at this time. The fifth year is a Chief of resident year in General Obstetrics and Gynaecology.

VIII. Program Structure

Residents will enter the programme having received a broad foundation in several aspects of general medicine and surgery during their internship year. Fundamental to the programme is a graded increase in responsibility for the resident as they proceed through the training. This level of responsibility will be dependent on their ability, experience and level of training. Appropriate levels of supervision for the trainee will be maintained throughout the program to maximize educational opportunities as well as to optimize patient care and satisfaction.

1. Core Rotations

The programme will provide a strong base of general obstetrics and gynaecology in all years with introductory training in each of the major subspecialty areas: maternal fetal medicine, reproductive endocrinology/infertility and gynecologic oncology. A minimum of 4 weeks will be spent in each of these subspecialty rotations during each year of the programme.

	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun
The residents would have completed all the requirements for the Arab Board and the RCOG during the first four years, and are expected to have passed all the examinations. Sep												
PGY 1				Obstetrics & Gynaecology 44 weeks; Ultra Sound 4 weeks; Leave 2 weeks								
	Part 1, Arab Board, MRCOG											
PGY 2				Obstetrics & Gynaecology 48 weeks; Leave 3 weeks								
	Jordanian Board part 1											
PGY 3				Obstetrics & Gynaecology 48 weeks; Leave <u>3</u> weeks								
PGY 4				Obstetrics & Gynaecology 44 weeks; Infertility 4 Weeks; Uro <u>gyn</u> logy <u>4</u> weeks; Leave <u>3</u> weeks								
	Part 2 MRCOG											
PGY 5				Obstetrics and Gynaecology 48 weeks, Leave 4 weeks								
Part 2	Jordanian Board, Arab Board											

Electives

The resident will be given the opportunity for additional experience in an area of interest that may be outside of the prescribed selective experiences. This 12 week elective period will be in an area to be chosen by the resident in consultation with her Programme Director.

Academic Half-Day

One half-day per week will be designated as protected academic time. This period will be utilized to bring all residents in the programme together in order to undertake lectures, workshops and other learning experiences that are best delivered in this format. These sessions are meant to compliment and augment learning that is taking place in the clinical setting. This session runs on Thursday morning.

Research Half-Day

One half-day per week will be designated as protected research time. This time will be utilized to develop and carry out a project that fulfills the research requirements of the programme. Further research time may be granted in the form of a block elective period for residents who have qualifying projects. A faculty member or a supervisor approved by the Department Chairman and Programme Director will supervise this project. This will be granted to PGY3 and above.

Chief Resident Year

In the senior year, the resident will assume responsibility, under supervision, approximating and consolidating consultant skills. He/she will provide care for ambulatory patients and in-patients with complex problems and will have administrative and educational responsibilities for a significant portion of the year. This year will include a minimum of 6 months in each of general obstetrics and gynaecology.

Vacation and Conference Leave-

Each year will include three weeks of vacation and one week of conference leave that may be taken at any time in the program with the approval of the Programme Director and the supervisor of the affected rotation. An effort will be made to avoid significantly impacting the educational experience on any single rotation that might occur should a prolonged leave take place within a single rotation.

Absences from training

Residents are entitled to short breaks as shown in the form of special leave, compassionate leave, sick leave. The totality of leave for these purposes should not exceed ten weeks during the five years of training. If this period is exceeded, additional training will be required and the date of Certification will be postponed.

IX. Evaluation of Resident Performance

Format

The ultimate responsibility for compiling the Final In-Training Evaluation of the resident lies with the Programme Director. During each rotation of the programme the resident will be supervised and evaluated by the rotation supervisor directly or by the members of the rotations teaching faculty as co-ordinated by the rotation supervisor. Evaluations will reflect the goals and objectives for the rotation as set out in this document. At the beginning of each rotation the goals and objectives for the rotation will be reviewed by the rotation supervisor with the resident and these will be reviewed periodically during the rotation to ensure that progress is being made towards their attainment.

Evaluation will be ongoing throughout the rotation and be composed of several components and will include a formal written exam, oral exam as well as by direct observation of resident performance in clinical situations. This evaluation will be at the end of each year.

Clinical and operative skills will be assessed by direct observation by the rotation's teaching staff. Communication skills will be assessed by direct observation of resident interaction with patients and families as well as by examining written communications to patients and colleagues. Resident's interpersonal skills will be assessed by observing collaborations with all members of the patient care team and their wise use of consultations with other specialties, subspecialties and non-medical disciplines. Teaching skills will be assessed by written student evaluation and by direct observation of the resident in seminars, lectures and case presentations. Attitudes will be assessed by observation and by using feedback from peers, supervisors, allied health personnel, and patients and their families.

Feedback

Honest and constructive feedback will be provided to the resident in a timely fashion. Formal feedback sessions will take place at the midpoint of each rotation and at the end of the rotation following the evaluation process. Examples of formats for the end of rotation In-Training Evaluation Form are in the appendix. There should also be regular feedback to residents on an informal basis. To facilitate this and to provide the rotation supervisor with further information to complete the end rotation In-Training Evaluation Form a day to day evaluation tool will be used. This tool will be either in the form of paper 'Encounter Cards' or one of the Palm Pilot based problem management programs currently available for postgraduate resident education. An example of an 'Encounter Card' is given in the appendix. As well, a case log will be maintained by the resident and signed by the senior clinician involved with the particular case. This will be inspected

periodically by the rotation supervisor and by the Programme Director and discussion around the cases will occur to ensure progress in the area of patient management. Examples of a case log page may be found in the appendix.

Standards

The residents and the Programme Director are ultimately responsible for the candidates' successful progress through and completion of the Programme. Each rotation evaluation will be reviewed by the Programme Director and any concerns will be reviewed with the resident. As well, rotation supervisors and site co-coordinators will be encouraged to make any concerns about the resident known at the earliest opportunity in order that any deficiencies may be addressed in a timely and effective manner. A clear plan for addressing any deficiencies will be developed by the involved parties.

If two consecutive evaluation reports are either "Borderline" or "Poor", or the resident is absent from the Programme for two months in any one year, the resident will be invited for counseling by the Programme Director and the resident's progress reviewed. Such a resident is allowed to continue with the Programme at the discretion of the Postgraduate Dean and based on the recommendation of the Programme Director and the Residency Programme Committee. It is expected that inputs from the tutors and the involved rotation and supervisors will weigh heavily in these considerations.

Any period of absence in excess of two months will result in the addition of a make-up period. The duration, timing and composition of this period will be at the discretion of Programme Director after consultation with the Residency Programme Committee and the involved resident.

The resident must pass the Part 1 examination of either the Arab Board for Specialization or the MRCOG starting at the end of the first year. If a resident has not passed either of these examinations after two attempts, the Programme Director will commence a review of the resident's progress and consideration may be given to withdrawing from the program and selecting an alternate career path.

Before the end of Year 5, a resident must have successfully completed all components of the Arab Board and RCOG Examinations. At the end of year 5 the residents will be assigned by an examination with the following components; a comprehensive written examination, a clinical examination and OSCE. This is a requirement for completion of the programme.

Should a resident be dissatisfied with their assessment at any point in the program they are encouraged to review the issues with the involved rotation supervisor or the Programme Director. If satisfactory resolution cannot be obtained the resident has the right to lodge a formal complaint with the Programme Director, the Residency Program Committee or the Postgraduate Dean. The complaint will then undergo the process as outlined in the guidelines for appeal.

X. Evaluation of the Programme

i. Residency Programme Committee

The Residency Programme Committee under the leadership of the Programme Director will be responsible for the ongoing evaluation of the programme. This will include an assessment of the strengths and weaknesses of the programme and recommendation of improvements. As well, all residency training sites, including elective experiences will be assessed and evaluated. Formal evaluation of all of the teaching staff affiliated with the programme. Discussion regarding the programme will occur at all residency programme committee meetings and a formal evaluation of the programme accompanied by a report should occur on a yearly basis.

ii. Internal Review

The internal review is intended as a mechanism to assist the sponsor in maintaining the quality of Residency Programme and providing the Programme Administrators with information about the strengths and weaknesses of the Programme, so that necessary corrective measures may be taken.

The internal review should be initiated by the Postgraduate Dean and the team should include: a Programme Director from another Programme, a staff member from another discipline who is experienced in postgraduate medical education, and a resident from another discipline. The review team should have available all documentation regarding the Programme. A series of interviews should take place with the Programme Director, teaching staff, members of the resident group, and with the Residency Programme Committee.

Visits to individual sites should occur when indicated. The internal review team should review all residency education sites and elective experiences. There should be a careful assessment of the quality of the program and the degree to which it fulfills its Goals and Objectives.

The written report of the internal review should include the strengths and weaknesses of the Programme and specific recommendations for continued development and improvements. This report should be submitted to the Postgraduate Dean, and made available to the Chair of the department, the Programme Director, and members of the Residency Programme Committee.

Internal Review should take place every two years

iii. External Review

The Programme should undergo an external review every 5 to 6 years. The process of the external review is similar to that of the internal review with the exception of the make up of the review committee. The external review is initiated by the Postgraduate Dean and the team should include: a representative of an accrediting body in Obstetrics and Gynaecology, a Programme Director from another Obstetrics and Gynaecology Programme accredited by the aforementioned body, a faculty member from another discipline who is experienced in postgraduate medical education, and a resident from an accredited external program.

The external review committee would generate a report that should include the strengths and weaknesses of the program and specific recommendations for continued development and improvements. This report should be submitted to the Associate Dean for Medical Education and made available to the Chair of the Department, the Programme Director, and members of the Residency Programme Committee.

XI. THE CERTIFICATE

On satisfactory completion of the entire programme of specialist training, the Programme Director will notify the Postgraduate Dean and a certificate of completion of training will be issued. The Certificate of Higher Specialization in Obstetrics and Gynaecology will be granted.

APPENDIX 1

Syllabus

Two levels of knowledge and proficiency are referred to in this document.

A **working level** indicates a level of knowledge sufficient for the clinical management of a condition, and/or an understanding of an approach or technique sufficient to counsel and recommend it, without having personally achieved mastery of that approach or technique. The physician should refer patients requiring this level of care to appropriate subspecialty trained colleagues.

An **extensive level** refers to an in-depth understanding of an area, from basic science to clinical application, and possession of skills to manage independently a problem in the area.

The following objectives must be achieved by the completion of Residency Training.

i. General Obstetrics

a. Antepartum Care:

The resident must have an extensive knowledge of maternal physiological changes in pregnancy, fetal development and physiology, antepartum assessment of mother and fetus, and the effects of underlying medical, surgical, social and environmental conditions on pregnancy.

c. Obstetric Complications:

The resident 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 labour, premature rupture of membranes, antepartum hemorrhage, gestational hypertension, multiple gestation, fetal growth restriction, isoimmunisation, dystocia, post-term pregnancy, and fetal death.

The resident must have a working knowledge of genetic screening, testing and counseling.

The resident 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 antepartum 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.

b. Medical and Surgical Complications:

The resident 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.

d. Intrapartum Care:

The resident must have the extensive knowledge and skills necessary to conduct normal and complicated labour and delivery.

He/she will be able to assess maternal and fetal health and progress in labour utilizing history and physical examination, intermittent auscultation, electronic fetal monitoring, basic ultrasound imaging and fetal scalp blood sampling.

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

e. Delivery:

The resident 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.

f. Postpartum:

The resident 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.

g. Medical Imaging:

The resident 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.

ii. General Gynaecology

a. Reproductive Physiology and Temporal Changes:

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

b. Paediatric and Adolescent Gynaecology:

The resident 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.

c. Reproductive and Endocrine Disorders:

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

d. Menopause:

The resident 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.

e. Human Sexuality: The resident 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.

f. Family Planning:

The resident 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.

g. Gynaecologic Infections:

The resident 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.

h. Breast Conditions:

The resident must have a working knowledge of the pathophysiology, diagnosis, and management of benign breast disease, screening and referral for breast cancer, and the effect of breast cancer and its therapies on the reproductive system.

i. Other Non-Malignant Gynecologic Conditions:

The resident 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.

j. Imaging:

The resident 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.

k. General Gynaecologic Surgery:

The resident must have extensive knowledge of the indications for and be skilled in the performance 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.

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

I. Laparoscopic and Hysteroscopic Surgery:

Laparoscopic Surgery

The resident 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 (stages 1 and 2), linear salpingotomy or salpingectomy for ectopic pregnancy, salpingectomy and salpingo-oophorectomy and ovarian cystectomy.

Hysteroscopic Surgery

The resident 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, removal of IUCD, and endometrial ablation.

The resident will require a working knowledge of more advanced laparoscopic and hysteroscopic techniques. He/she should know the indications for and limitations of laparoscopically assisted vaginal hysterectomy in comparison with vaginal and abdominal hysterectomy.

m. Preoperative and Postoperative Patient Care:

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

n. Medical and Surgical Diseases:

The resident 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. 25

iii. Gynaecologic Oncology

a. Risk Factors

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

b. Screening

The resident 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 resident 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. 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 resident 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 resident 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 resident 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. Imaging:

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

l. Palliative Care

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

iv. Reproductive Endocrinology / Infertility

a. Infertility:

The resident 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 resident will be aware of the effectiveness, and complications of current standard treatments as well as appropriate indications for subspecialty referral.

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

b. Pregnancy Loss:

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

vii. Maternal-Fetal Medicine

a. Medical and Surgical Complications:

The resident 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, hematologic, endocrine, and neuropsychiatric diseases as well as autoimmune and neoplastic conditions.

b. Obstetric Complications:

The resident 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 labour, premature rupture of membranes, antepartum hemorrhage, gestational hypertension, multiple gestation, fetal growth restriction, isoimmunisation, dystocia, post-term pregnancy, and fetal death.

c. Infectious Diseases:

The resident 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. Imaging:

The resident must have an extensive knowledge of the indications and technique for basic obstetrical ultrasound and tests of fetal well-being. They must have a working knowledge of the indications, technique and limitations of Level 3 ultrasound.

e. Fetal Diagnosis and Therapy:

The resident 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.

Epidemiology and Clinical Research Methods

Epidemiological terms in obstetrics, gynaecology and neonatal paediatrics.

Understand the following epidemiological terms: live birth, abortion, miscarriage, still birth, preterm birth, neonatal mortality, perinatal mortality, infant mortality, maternal morbidity, maternal mortality and low birth weight.

Population terms:

Understand birth, immigration, death, emigration, the 4 demographic processes, which might act on a population group.

Other epidemiological terms:

Understand and able to apply the following:

Etiological factor: the reduction in disease when a risk factor is removed

Density dependence: effects in which intensity increases with increasing population density

Cumulative incidence

Patterns of infection: endemicity, epidemics, and herd immunity

Rates: attack rate, case fatality rate, mortality rate

Risk: risk factor, attribute, exposure, competing risk, induction period and latent period, risk determinant and risk marker

Epidemiological methods:

Be able to:

Search the literature and data-bases purposefully

Appraise critically relevant articles and reports

Interpret findings and consider their applications to other contexts

Know how to select and draw on clinical evidence to inform practice

Research methods

Be able to define the following terms:

- Clinical significance
- Statistically significant / insignificant

- Variability
- Biological variability
- Laboratory variability
- Observer variability
- Data types: categorical, continuous, discrete, qualitative, quantitative

Understand the following methods of, and terms associated with, data collection:

- Epidemiological studies
- Randomized controlled clinical trials
- Randomized cross over clinical trials
- Randomized controlled laboratory study
- Observational studies
- Discrete and continuous variables
- Sample size determination

Recognize and understand the following concepts of problems associated with data:

- Bias: confounding bias, measurement bias, sampling bias
- Randomization
- Stratification
- Blindness (masking)
- Relevance of sample size to the ultimate
- Outcome of the statistical analysis
- Understand the significance and limitations of measures of central tendency:
- Mean, median, mode
- Variance
- Co-variance
- Standard deviation
- Confidence interval

Understand and apply the following statistical terms:

- Probability and probability distribution models
- Regression and correlation analysis

- Risk – sensitivity analysis, particularly:
- Absolute risk
- Absolute risk difference
- Absolute risk reduction
- Attributable risk
- Etiologic fraction
- Relative risk
- Exposure odds ratio
- Number needed to treat
- Significance testing
- Meta-analysis

Research skills:

- Using electronic databases such as Medline and the Internet to conduct literature searches and to locate information
- Critically appraise/evaluate relevant literature, reviews and new techniques/technologies
- Use word processors, databases, spreadsheets and statistical packages to produce statistical analysis and research papers
- Conduct a literature review
- Develop an hypothesis to be tested
- Choose an appropriate research methodology and design a research study
- Write a grant application to fund a research project.
- Apply for ethics committee approval for a clinical or laboratory based study
- Collect, collate and interpret data
- Apply basic statistical analysis to clinical data
- Develop an outline structure for a research paper
- Write a literature review for a research paper
- Apply the developed outline to write a research paper

XIII. SUPERVISION OF THE RESIDENTS

Policy

- 1.Clinical Teaching staffs are essential and important to the successful implementation of the [Dubai-JUH](#) residency training Programme.
- 2.Clinical Teaching staffs are expected to be familiar with the goals and objectives of the programme as well as of the rotation for which they have responsibility.
- 3.Clinical Teaching staffs are expected provide a direct and appropriate level of clinical supervision to all residents during clinical rotations.
- 4.Clinical Teaching staff are expected to foster an effective learning environment by ensuring that the (a) residents share responsibility for decision-making in patient care under supervision, (b) residents have constructive feedback from the concerning clinical

skills at diagnosis and management (c) participation of residents in patient care adds to the effectiveness, appropriateness and quality of care.

Procedures

1. Clinical responsibilities must be assigned to the residents in a carefully supervised and graduated manner, so that the resident assumes progressively increasing responsibility in accordance with their level of education, ability, and experience.
2. Teaching staff supervision must include timely and appropriate feedback to the residents.
3. The resident's clinical involvement must be in fulfillment of the programme's written educational curriculum.
4. Teaching staff must demonstrate concern for each resident's well-being and professional development.
5. Teaching staff who supervise the residents have overall responsibility for patient care and are the ultimate authority for final decision.
6. Teaching staff schedules must be structured to ensure continuous supervision of residents and availability of consultation.
7. All decisions regarding diagnostic tests and therapeutics, initiated by the residents will be reviewed with the responsible Consultants during patient care rounds.
8. Patients will be seen by the team of residents, interns and medical student and their care will be reviewed with the Consultant at appropriate intervals.

The residents are required to promptly notify the patient's Consultant physician in the event of any controversy regarding patient care or any serious change in the patient's condition.

10. In clinics and consultation services, the Consultant or supervising physician must review overall patient care rendered by residents.

11. In the operating theatres, the Consultant or supervising physicians are responsible for the supervision of all operative cases. Consultants supervising physicians must be present in the operating room with residents during critical parts of the procedure. For less critical parts of the procedure, the Consultant or supervising physician must be immediately available for direct participation.

Logbook Contents

The items that will be kept in the case log will be reviewed periodically by the Residency Programme Committee and the teaching staff. Current suggestions for log book tracking include:

- Case Presentations
- Pre-Operative Assessments
- Post-Operative Follow-Up and Management
- Discharge Summaries of Patient's Managed
- Ambulatory Care – Obstetrics
- Ambulatory Care – Gynecology
- Ambulatory Care - Gyn Oncology
- Ambulatory Care - Reproductive Endocrinology/Infertility
- Ambulatory Care – Urogynecology
- Ambulatory Care - Maternal-Fetal Medicine
- Ambulatory Care – Community Health Care Centre
- NICU Cases
- Ultrasound – Obstetrics
- Ultrasound – Gynecology
- External Cephalic Version
- Management of Labour
- Normal Deliveries
- Vacuum Deliveries
- Forceps Deliveries
- Breech Delivery
- Episiotomy/Laceration Repair
- Caesarean Section
- Cystoscopy
- Hysteroscopy
- Dilatation and Curettage

- Evacuation of Retained Products
- Laparoscopy
- Laparoscopic Tubal Ligation
- Laparotomy - Ovarian / Tubal
- Laparotomy – Hysterectomy
- Laparotomy – Oncology
- Vaginal Hysterectomy
- Anterior and Posterior Colpoperineorrhapy
- Operations for Stress Incontinence
- Health Maintenance – the Climacteric
- Colposcopy and Cytology

Textbooks & Resources*

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Cuilligan, E., 'Douglas-Stromme's Operative Obstetrics', McGraw-Hill, 1992
Baron, W., 'Medical Disorders During Pregnancy', Mosby-Yearbook, 2000
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Disaia, P., 'Clinical Gynecologic Oncology', Mosby-Yearbook, 1998
Speroff, L., 'Clinical Gynecologic Endocrinology and Infertility', Lippincott Williams & Wilkins, 1999
2001 Compendium of Selected ACOG Publications, American College of Obstetrics and Gynecology, Washington, DC, 2003
Cochrane Collaboration, 'The Cochrane Library', Oxford University Press, Update Software, 2003

*suggested texts and resources are meant as a guide only. It is recognised that learning materials will be individualized based on need and learning style.

XIV. References

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- General Information Concerning Accreditation of Residency Programs, Royal College of Physicians and Surgeons of Canada, September 2006
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Educational Objectives: Core Curriculum in Obstetrics and Gynecology, Council on Resident education in Obstetrics and Gynecology, American College of Obstetrics and Gynecology, 2000

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