Feto-Maternal Medicine

Feto-Maternal Medicine is a rapidly progressing sub specialty in Obstetrics and Gynaecology worldwide. It focuses on the surveillance and management of high risk pregnancies especially those complicated by the structural or chromosomal fetal abnormalities or with medical disorders in pregnancy. Fellowship in Feto-Maternal Medicine, the first ever formal training programme in Pakistan was launched in 2009 at the Aga Khan University Hospital Karachi. This unique two year programme offers extensive experience in the clinical management of high-risk obstetric patients as well as formal training and excellent mentorship in clinical and research activities.

Objectives

This Fellowship programme aims to:

- Enable a Fellow to become proficient in prenatal diagnosis (level III obstetric scans), antenatal care and management of complicated pregnancies.
- Support protected research that can be divided over two years as best accommodates any formal research training.
- Enhance the educational experience through didactic sessions, seminars, courses and lectures.

Supervising Faculty will include Fetal and Maternal Medicine Faculty and other obstetricians involved in the care of complicated obstetric cases.

Training format

Year 1

In the first year Fellow rotates 6 months in Fetal Medicine clinics and 6 months in Maternal Medicine clinics. An attending Fetal-Maternal Specialist will manages the content of the clinic and serves as a mentor. During clinical rotations in Fetal Medicine, fellow spends 5 days per week in the Fetal Medicine clinics. Each week they see patients referred secondary to being at risk for or suspected to have an anomalous fetus or growth restricted fetus. The Fellow is responsible for counseling the patient about the significance of any findings, developing a management plan for the remainder of the pregnancy, performing level III screening ultrasounds, and observing prenatal diagnostic procedures (amniocentesis and chorionic villus sampling) that are necessary. The Fellows are supervised by Fetal Medicine Faculty during their rotation in the Fetal Medicine clinics.

Year 2

The major emphasis will be on achieving advance competency level in management of complicated obstetrics cases and research activities. The Fellow will be encouraged to conduct independent Fetal and Maternal Medicine clinics, and performing level three fetal scans.

The Fellow will be encouraged to enroll in formal training courses in Epidemiology and Biostatistics as well as designing and conducting research studies under Faculty supervision. Publication of at least one original article in an indexed journal on Fetal-Maternal Medicine related topics will be a requirement of Fellowship completion. The Fellow will complete a period of at least 2 years of combined high risk obstetrics and level III obstetric ultrasounds.

Objectives at the end of each year

Year 1:

Fellow will work in a clinical role acquiring competency in cognitive and technical skills related to the diagnosis and management of complicated obstetric cases and fetal medicine screening procedures.

The first year is structured as an integrative experience. Fellow will attend rounds on admitted high risk obstetric cases and conduct supervised Maternal Medicine and Fetal Medicine clinics. There will be rotations in various medical specialty clinics and critical care areas such as Neonatal intensive care unit etc. according to a structured schedule. During the Fellowship in Fetal Medicine clinics, the Fellow will perform fetal medicine scans under
direct supervision of the faculty and will be able to learn and then subsequently perform procedures such as nuchal translucency thickness test, fetal biometry, multivessel Doppler studies and anomaly scans. Two half day slots per week will be reserved for education and development of research. This time is used to explore both basic science and clinical research opportunities. Fellows will be strongly encouraged to pursue formal training courses in research methodology offered by Aga Khan University.

Year2:
- Advance level competence in clinical and research activities at tertiary as well as secondary health care level.
- Advanced competence in diagnosis and management of high risk obstetric cases; Able to function independently as Fetal Maternal Medicine specialists.
- Conduct independent Fetal-maternal medicine clinics in secondary care centers of AKU with timely referrals to AKU when required
- Advanced competence in research methods, including grant writing, designing and conducting independent research project; must have at least one paper accepted for publication.
- Fellows will be strongly encouraged to pursue formal training courses in research methods already available at the University,
- Fellows will be encouraged to attend short courses online in their specialization.

Evaluation of fellows

During the training period the trainee will be expected to keep a log of the work done. Update the records as necessary. Continuous assessment will be carried out by all faculty members involved in high risk obstetrics. There will be two monthly appraisals with the supervisor to review log book and assessment of progress of the trainee.

Formal assessment:
- Written evaluation by supervising faculty every two months
- Six monthly written and oral assessment and feedback is done by the Program Committee
- Assessment tests at the end of courses attended
- Development of study proposal by end of first year
- Acceptance of at least one research paper for publication by end of second year

Duration

The programme offers a two-year Fellowship. Training format as stated above.

Eligibility
- MBBS or Equivalent registered by PMDC
- One year House Job with at least three months in Obstetrics & Gynaecology
- Completed the CPSP recognised residency programme in Obstetrics and Gynaecology
- FCPS or MRCOG or Equivalent in Obstetrics and Gynaecology

Positions available

One to two fellows will be taken each year.

Administrative set-up
- Dr. Nuruddin Mohammed, Director, Maternal and Fetal Medicine
- Dr. Shama Munim, Director Maternal and Fetal Medicine Fellowship Programme
- Dr. Ayesha Malik, Coordinator, Maternal and Fetal Medicine Fellowship Programme
Full-time faculty

Professor
Dr Shama Munim MBBS SMC; FRCOG UK Diploma Fetal Medicine, Royal College of Obstetrician and Gynaecologists, UK
Director, Fetal and Maternal Medicine Fellowship Programme

Associate Professor
Dr. Lumaan Sheikh MBBS DUHS; FRCOG UK; FCPS PAK;
Diploma in Maternal Medicine, Royal College of Obstetricians & Gynaecologists, UK.
Interim Chairperson, Department of Obstetrics and Gynaecology
Consultant Maternal Medicine

Assistant Professors
Dr. Nuruddin Mohammed
M.B.B.S AKU; PhD (Fetal Medicine, S’pore); MSc (Fetal Medicine, S’pore); Di p. Advanced Obstetrics Ultrasound (RCOG/RCR U.K); Fellowship Mat Fet Medicine (S’pore); Postdoctoral Fellowship, Adv Fet Med (Spain)
Director, Maternal and Fetal Medicine
Consultant Fetal Medicine

Dr. Ayesha Malik
MBBS DUHS; FCPC PAK; MSc (AKU)
Fellowship MFM Aga Khan University

Dr. Ghulam Zainab
MBBS PMC; FCPS PAK
Fellowship MFM Aga Khan University

Dr Shazia Masheer
MBBS DUHS; FCPS
Consultant with Special interest in Maternal Medicine