



MGM INSTITUTE OF HEALTH SCIENCES

Accredited by NAAC with 'A' Grade

(Deemed University u/s 3 of UGC Act, 1956)

Sector-01, Kamothe, Navi Mumbai - 410 209

Tel 022-27432471, 022-27432994, Fax 022 - 27431094

E-mail : registrar@mgmuhs.com ; Website : www.mgmuhs.com

Curriculum for Fellowship in Clinical Nephrology (w.e.f. Academic Year 2018-19)

Approved as per BOM –53/2018, [Resolution No. 4.8], Dated 19/05/2018



**Mahatma Gandhi Mission University of Health
Sciences, Mumbai**

Syllabus

“Fellowship course in Clinical Nephrology”

1. Proper name of the Fellowship course in Clinical Nephrology
Fellowship Course in Clinical Nephrology

2. Duration of the course
1 year (12 months)

3. Eligibility criteria for admission Intake capacity

➤ Post MD/DNB/CPS or other equivalent degree recognized by MCI in Internal Medicine or Paediatrics

Intake capacity : 2 per year.

4. Complete curriculum of the course

4a. Nephrology

- Anatomy and Physiology of the kidney
- Structural and functional relationship
- Sodium, Potassium, Calcium and Phosphorus Tubular transport
- Normal acid base control and abnormalities of acid base balance.
- Urine analysis
- Laboratory evaluation of Kidney function
- Various radiological diagnostic and interventional procedures
- Kidney Biopsy : indications and interpretation
- Genetic Kidney diseases
- Urinary tract infection : Complicated and uncomplicated
- Urinary tract obstruction.
- Reflux nephropathy
- Nephrolithiasis
- Renal cell carcinoma & other neoplasms of genitourinary tract
- Acute renal failure
- Hypertension
- Glomerular diseases : Primary and secondary
- Interstitial renal diseases
- Vascular renal diseases
- Disorders of fluid, Electrolyte, water and acid base
- Systemic diseases of the Kidney
- Kidney diseases in children

4b Uremic syndrome and management of end stage renal diseases

- Anemia in renal diseases
- The Osteodystrophy of chronic renal failure
- Nervous system Manifestations of renal failure
- Cardiac disease in chronic renal disease
- Metabolic and Endocrine Dysfunctions in uremia
- Dietary factors in treatment of chronic kidney disease
- Early detection and prevention modalities from chronic renal disease
- Use of drugs in patients with renal failure
- Indications for renal replacement therapy and introduction to various modes of renal replacement therapy.

5. Teaching scheme: Total periods and periods allotted to each topic

Didactic lectures : These will be held once a week and will be delivered either by a faculty member or by a specialist in the area from the Nephrology or allied disciplines.

Seminars and journal clubs : Seminars and journal clubs will be held once a week. Candidates are required to present 1 seminar and 2 journal clubs per month.

Clinical Case discussions : This will be held every weekly and each student is expected to present & discuss 12 clinical cases in a year.

CPC (Clinico - Pathological - Correlation) meetings is held by the institute once a month. The attendance in this meeting is compulsory.

Ward rounds and postings :

Ward rounds are taken every day attendance of which is compulsory. Student will rotate through the postings in General Nephrology ward, dialysis unit, Intensive Kidney Care Unit and kidney transplant room. Each student will take care of the patients admitted under the concerned section allocated to him.

OPD patient care:

Each student will attend all the OPDs which include two General OPDs and one kidney transplant OPD per week.

Procedures :

Following procedures will be demonstrated to each student which he will do himself as he is involved in patient care actively

1. Placement of double lumen central Venous catheter for Hemodialysis.
2. Hemodialysis Procedure
3. Acute peritoneal dialysis catheter placement
4. Peritoneal Dialysis procedure
5. Renal biopsy
6. Plasmapheresis
7. Continuous Ambulatory Peritoneal Dialysis
8. Continuous Renal Replacement Therapy

Histopathology :Each student will attend Nephropathology meet with the nephropathologist which is held once in a week.

Nephrology Urology meet. : Each student will attend the Nephrology - Urology meet which is held once every 2 weeks.

*Nephrology Radiology meet :*Each student will attend the Nephrology Radiology meet which is held once a month.

Project and paper presentation work:

Each student will be required to undertake a research project in a topic decided after consultation with guide. The project work will be submitted in the form of a thesis at the end of 12 months of the fellowship.

Attending conferences:

The candidate will attend the following

- Yearly West Zone Chapter conferences of India Nephrology Society. Each student must attend one conference during his tenure.
- Yearly Conference of Indian Society of Nephrology. Each student must attend one Conference during his tenure.

6. Text books and reference books

Books

- Diseases of the kidney and urinary tract : by Schrier
- The Kidney : by Brenner
- Oxford textbook of clinical Nephrology
- Therapy in Nephrology and hypertension : by Brady Wilcox
- Pediatric and Kidney Diseases : by Edelmann.
- Pathology of Kidney diseases : by Heptinstall.
- Intensive Care Nephrology By Murray

Journals

- Kidney international
- Nephrology, dialysis and Transplantation
- American journal of Kidney diseases
- Journal of Indian Society of Nephrology.

7. Scheme of examination in details :(Number of question papers, Number of marks to each question paper, Duration of question paper, practical examination etc.)

Theory and practical examination will be concluded within 15 days of the end of the course. Examination will be conducted in the concern college. Each examination will have one internal and one external examiner which will be approved by Examination Co-ordination Committee.

Theory

- 2 papers of 100 marks each. First paper will include physiology with anatomy, various investigations, genetic kidney diseases, obstructive uropathy, Urinary tract infection, reflux nephropathy, Nephrolithiasis, neoplasms of Genito-urinary tract, acute kidney failure, hypertension, Glomerular diseases while second paper will include Vascular, interstitial and systemic, Kidney diseases, important kidney diseases in children, electrolyte, water, acid base abnormalities, Uremic syndrome and renal replacement therapy.
- Each Paper will have 10 short notes of 10 marks each. Passing marks will be 50%.
- All theory examinations will be held on a single day.
- Passing percentage is 50%.

Practical

- Two clinical cases of 50 marks each
- Five problem oriented spots of 10 marks each.
- Viva of 50 marks.
- Passing percentage is 50%.

8. Infrastructure required for conducting the course and its availability in your college.

The existing infrastructure of the Department of Nephrology will be used.

- The Department has 40 beds of its own.
- It has four different wings inclusive of Artificial Kidney Division, Intensive Kidney care unit, Kidney Transplant room and General Nephrology ward.
- The department has its own seminar room, laboratory, library, Computer with journals on line, Resident room. No. additional infrastructure is necessary. [Appendix II :)

equipments]

9. Faculty required with their qualification and experience

1) Professor, M.D.[Gen. Med] & D.M. [Nephrology]

Teaching experience of 36 years and is Teacher of DM Nephrology

2) Asso. Professor, DM Nephrology, teaching experience 10 years.

3) 2 Lecturers in Nephrology, M.D. [Gen. Med] & D.N.B. [Nephrology]