



MGM INSTITUTE OF HEALTH SCIENCES
(Deemed University u/s 3 of UGC Act, 1956)
Grade 'A' Accredited by NAAC

PhD CET Syllabus

**Paper II - Subject Specific Test
Nephrology**

The aim of the course is to develop human resources and personnel in the field of Nephrology who shall

- i) provide the health care to the patients needing renal care
- ii) teach and train future undergraduate and postgraduate medical students and junior doctors in Nephrology in Medical Colleges, Institutions and other Hospitals.
- iii) carry out and guide research to improve the practice of the art and science of nephrology
- iv) have management capabilities to manage personnel and budgets etc. to make health more cost-effective.
- v) organise health teams to provide care during natural or man-made calamities.

(Objectives)

Departmental objectives : At the end of the DM Nephrology course, students shall be able to :

- i) practice the art and science of nephrology in his/her field of practice and seek and provide consultation as required. He will have knowledge, skill and attitude to provide comprehensive renal care.
- ii) conduct researches and communicate the findings, results and conclusion to his fraternity.
- iii) acquire necessary skills of teaching and training his junior colleagues and medical students.
- iv) keep abreast with the latest developments by self-learning and /or participating in continuing Medical Education programmes.
- v) organise and manage administrative responsibilities for routine day to day work as well as new situations including natural and on man-made accidents/calamities etc. and be able to manage situations calling for emergency interventions in the sphere of renal care and also routine problems in their areas.
- vi) exhibit awareness of the importance of audit and the need for considering cost-effectivity in patient management.
- vii) deliver preventive and rehabilitative care.

Course content

Since the students are trained with the aim of practicing as independent nephrologists, this course content will be merely a guideline. They have to manage all types of cases and situations and seek and provide consultation. The emphasis shall therefore be more on the practical management of the problem of the individual cases and the community within the available resources.

(Applied basic sciences knowledge relevant to the field of nephrology.

Investigative techniques, selection and interpretation of results

Pathogenesis of renal diseases & Renal histopathology.

Diseases of the urinary tract (glomerular diseases, urinary tract infection, tubulointerstitial

Diseases, inherited diseases, toxic nephropathies, systemic diseases with renal involvement,

Renal stone disease, urinary tract obstruction, Vascular diseases of kidney, hypertension, neoplasia etc)

Renal failure (diagnosis & medical management)

Principles and practice of dialysis, fluid, electrolyte & acid-base balance

Renal transplantation

Recent advances in nephrology

Biostatistics & clinical epidemiology, research methodology)

Preventive nephrology.

Skills : 1) Haemodialysis, Peritoneal dialysis, CAPD, Continuous renal replacement therapy,

Plasmapheresis, Vascular access, Native and graft kidney biopsies.

2)Communication

3)Education/training

4)Self directed learning

5)Research