



RCSI

POST GRADUATE DIPLOMA IN NURSING (RENAL CARE)

MODULE DESCRIPTOR

RCSI DEVELOPING HEALTHCARE LEADERS WHO MAKE A DIFFERENCE WORLDWIDE

Module Title	Care of the Patient receiving Renal Replacement Therapy (Optional Module)
Level of Learning	9 NFQ
Pre-requisite course	Primary degree or equivalent
ECTS Credits	10
Module Coordinator	Ms Mary O'Neill M. Paul Mahon
Module Lecturers	Ms. Ciara White & medical and allied health specialists in the area of caring for the renal patient will be included at appropriate stages in the module.

Rationale of Module

The trajectory of illness characterizing end stage kidney disease is one of progressive, irreversible and gradual decline in patients' functional status (Holley 2012), with renal replacement therapy or kidney transplantation becoming necessary for patient survival. The most up to date information from the National Renal Office puts the incidence rate of patients on renal replacement therapy at 3775 for the end of 2011. Nurses caring for patients receiving renal replacement therapies require specialist knowledge and it is recognised that they are an essential component in the multidisciplinary management of this group of patients.

Module Aims

This module aims to provide the student with theoretical and practical knowledge related to in-centre haemodialysis and home therapies in the treatment of both acute and end-stage kidney disease. It also aims to enhance the student's understanding, skills and attitudes so that he/she may utilise higher levels of clinical judgment, problem solving skills, communication and team skills and evidence based care to systematically care for patients, their partners and their families receiving these forms of renal replacement therapy.

Learning Outcomes

On successful completion of this module, the student will be able to:

- Critically appraise the physiological and technological principles of renal replacement therapies including haemodialysis and peritoneal dialysis.
- Demonstrate critical awareness of the holistic nursing care and management of the renal patient receiving renal replacement therapies
- Critically explore the complications associated with renal replacement therapies including their management and prevention.
- Critically discuss the physiological concepts and principles of dialysis adequacy.
- Critically explore the forms of therapy available for the management of acute renal failure in the critical care setting.
- Critically explore the principles of therapeutic plasma exchange and the renal nursing management of a patient receiving this therapy.



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Indicative Syllabus

- The physiological principles, technologies and techniques of haemodialysis
- Water treatment and water quality for haemodialysis
- Anti-coagulation in haemodialysis
- Concepts and principles of dialysis adequacy.
- The principles, complications and management of vascular access for dialysis.
- Acute complications of the haemodialysis treatment
- Long term management of the patient on regular haemodialysis therapy
- Haemodialysis in the management of acute renal failure
- Dialysis in the critical care setting
- The management and prevention of infection in renal failure patients receiving haemodialysis
- The evolution of peritoneal dialysis.
- Patient selection criteria for peritoneal dialysis and home haemodialysis.
- The physiological principles of peritoneal dialysis.
- Dialysis Technologies for Home Dialysis Therapies.
- The peritoneal dialysis prescription and adequacy of dialysis.
- Peritoneal membrane transport characteristics.
- Access for peritoneal dialysis therapy.
- Preparation of patients for home dialysis therapy.
- The aetiology, pathophysiology, treatment, prevention and nursing management of infectious, non-infectious and metabolic complications of peritoneal dialysis.
- Renal Virology
- Adherence to treatments
- Ethical issues in dialysis
- National/UK/ European/ K/DOQI Standards/ Guidelines for Haemodialysis and Peritoneal Patients including Infection Control Policies and Procedures

Teaching Learning Activities	Hours
Contact hours including face to face tutorials & workshops	36
Course work preparation	44
Directed reading & study	160
Assessment	10
Total	250



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Examination/ Assessment Method	Type of Assessment (Continuous/Terminal)	Weighting
Presentation at Nursing Symposium (oral or poster)	Terminal	20%
Clinical Practice Improvement Project	Continuous	80%

Indicative Reading

- Akoh J. & Hakim N. (2001) *Dialysis Access- Current Practice*, Imperial College Press, London.
- Brown J., Kitson A., McKnight T., Daugirdas J. & Ing T. (1996) *Handbook of Dialysis, 3rd edn.* Little, Brown & Company, Boston.
- Coles, G. (2001) *A Manual of Peritoneal Dialysis*, Springer Publishing, New York.
- Dell'Aquila R., Ronco C. & Rodighiero M.P. (2006) *Peritoneal Dialysis: A Clinical Update*, Karger, Switzerland.
- Gokal R., Nolph K., Rhanna R. & Krediet R. (2000) *Textbook of Peritoneal Dialysis*, Kluwer, Dordrecht.
- Kallenbach J., Gutch C., Stoner M. & Corea A. (2005) *A Review of Haemodialysis for Nurses and Dialysis Personnel*, Mosby, California.
- Levy J., Morgan J. & Brown E. (2005) *Oxford Handbook of Dialysis, 2nd edn.* Oxford University Press, Oxford.
- Maher J. (1992) *Replacement of Renal Function by Dialysis, 3rd edn.* Kulwer, Dordrecht.
- Molzahn A. & Butera E. (2006) *Contemporary Nephrology Nursing: Principles and Practices, 2nd ed.* American Nephrology Nurses Association, Pitman, New Jersey.
- Smith T. (1997) *Renal Nursing*, Bailliere Tindall, UK.

Useful Journals

- American Journal of Kidney Diseases
- Hemodialysis International
- Journal of Advanced Nursing
- Journal of Clinical Nursing
- Journal of Renal Care
- Kidney International
- Nephron
- Nephrology
- Nephrology, Dialysis and Transplantation
- Nephrology Nursing Journal
- Peritoneal Dialysis International
- Seminars in Dialysis
- Therapeutic Apheresis and Dialysis

Additional reading material will be provided by individual lecturers

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