

SCOPE OF PRACTICE

FOR NEPHROLOGY NURSES

IN KENYA



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The Registrar,

Nursing council of Kenya,

P.O Box 20056-00200,

Nairobi, Kenya.

Tel: 3873556/3873585

Fax: 3873585

Cell: +254721920567/+254733924669

Email – info@nckkenya.org

Website: www.nckkenya.com



Our Vision

A world-class regulatory body in nursing and midwifery education, and practice



Our Mission

Develop standards, enforce regulations in nursing and midwifery education, and practice



Our Values

Our core values express that everything we do comes from deeply-held commitments and shared understanding of our values, what we stand for, how we treat each other and those we serve; that inform every policy and steer every action summarized as:

I – Integrity: We are committed to acting in an honest, accountable and transparent manner in all our undertakings

N – Nurture: We value and nurture the strength of character it takes to work together as a team, to be an individual, to respect differences of opinions, and have the ability to empathize with others.

S – Social responsibility: Caring for the patient, family, community and the environment

P – Professionalism: We are dedicated to the highest levels of achievement obtainable through competencies and critical skills.

I – Innovation: We thrive on creativity and ingenuity. We seek the innovations that

are evidence-based and data-driven to bring a positive change to the Council.

R – Responsiveness: We act with a sense of urgency, make qualified decisions in time and provide fiscally responsible solutions.

E – Excellence: We pledge the highest levels of effectiveness and efficiency

FOREWORD

The Nursing Council of Kenya is mandated by law to make provision for nursing education and practice to ensure safe practitioners. Similarly, the mission of the Council is to ensure the provision of quality nurses training and maintenance of professional nursing practice through appropriate regulations. In order to fulfill the mission and vision and, to realize its core mandate the Council is guided by regulatory tools like the scope of practice.

The burden of kidney disease is increasing worldwide, Kenya included. An effective workforce is essential to ensure delivery of high-quality care to include prevention, promotion and management of the kidney diseases. The nephrology nurse is a critical component of the multidisciplinary team that takes care of the kidney patients. The nephrology nurse must be sufficiently prepared to take up the expanded roles in the kidney units, with new definition of the limits of care and legal boundaries of the nursing practice

This document elaborates on the scopes of different levels of nephrology nurses in the country and can be applied in all health settings. We believe that this document will be of great benefit to all the users and will contribute to improved quality of kidney care.

Prof. EUNICE NDIRANGU

CHAIRPERSON

Nursing Council of Kenya

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- Kenyatta University School of Nursing Sciences
- NNAK

EDNA C. TALLAM- KIMAIYO

**REGISTRAR/CEO
Nursing Council of Kenya**

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LIST OF ABBREVIATIONS

AKI	-	Acute kidney injury
ACLS	-	Advanced Cardiac Life Support
AVF	-	Arterial Venous Fistula
CKD	-	Chronic Kidney Disease
ECG	-	Electro Cardiogram
ESKD	-	End Stage Kidney Disease
EAKI	-	East Africa Kidney Institute
HD	-	Hemodialysis
KMTC	-	Kenya Medical Training College
NCK	-	Nursing Council of Kenya
NNAK	-	National Nurses Association of Kenya
PD	-	Peritoneal Dialysis

Section 1

1:1 INTRODUCTION

Nephrology Nursing is a distinct area of specialized nursing practice addressing the prevention, promotion and management of the health and wellbeing of individuals with kidney disease. Nephrology nurses assume a wide range of responsibilities from clinical care to administration. It encompasses the primary, secondary, and tertiary care of individuals with potential and progressive chronic kidney disease (CKD), end-stage kidney disease (ESKD), acute kidney injury (AKI), and other health care conditions requiring nephrology intervention across all age groups.

1.2 Overview of the Scope of Practice for Nephrology Nursing

The practice of nephrology nursing encompasses the roles of direct caregiver, educator, coordinator, consultant, administrator, and researcher. The practice extends to all care delivery settings in which patients experiencing, or at risk for developing CKD stages 1 through 5, receive health care, education, and counseling for kidney disease prevention, diagnosis, progression, and treatment. Optimal individual physical, cognitive and family functioning throughout all phases of disease management are the primary goals of nephrology nursing. The nephrology nurse achieves these primary goals by diagnosing and treating human responses exhibited by individuals and families with kidney disease or who are at risk for developing CKD.

These human responses include, but are not limited to, physical symptoms, functional limitations, psychosocial disruptions, and knowledge needs.

Management of these responses involves health promotion, disease prevention, counseling, health maintenance, education and psychosocial support to build or sustain coping capacity. It also entails education to encourage active participation in decision making and self-care, restorative physical care to manage disease and treatment-related symptoms, as well the delivery of kidney-replacement therapies including transplantation.

SECTION II: SPECIFIC SCOPE OF PRACTICE

2.1 HIGHER DIPLOMA IN NEPHROLOGY NURSING

The nurse has a higher diploma in nephrology nursing and has acquired nephrology nursing competencies to work at both operational and management level in the health care system. In addition to the registered nurse competencies, the nephrology nurse at this level will:

1. Use the nursing process in the management of patients presenting with kidney conditions.
2. Coordinate care in collaboration with other members of the multidisciplinary team to provide quality care to patients with renal conditions.
3. Monitor and follow up on care provided to patients with nephrology conditions.
4. Participate in kidney transplant evaluation.
5. Perform peri and post-operative care for both donor and recipient as well as post-transplant care and follow-up.
6. Diagnose and manage or mitigate pre-dialysis, intra-dialysis and post dialysis emergencies.
7. Perform special procedures as per appendix 2.
8. Prepare, use and care for special equipment used in renal unit.
9. Perform renal dialysis therapy.
10. Provide psychosocial support, guide and educate patients, families, and communities on renal matters.
11. Identify, perform and participate in the rehabilitation of renal patients.
12. Participate in implementation of health nephrology programs.
13. Undertake community primary health care in the promotion and prevention of kidney diseases.
14. Prescribe, perform and interpret laboratory investigations as per appendix 3.
15. Provide palliative care services to patients with kidney diseases.
16. Prescribe and administer medications during dialysis, transplant and in post-transplant.

17. Provide clinical mentorship to multidisciplinary team members in nephrology care units.
18. Manage nephrology care services at hospital ward/unit level.
19. Participate and utilize research findings to promote nephrology care.

2.2 POST- GRADUATE DIPLOMA IN NEPHROLOGY NURSING:

The nurse has a post-graduate diploma in nephrology nursing and has acquired nephrology nursing competencies to work at both operational and management level in the health care system. In addition to the registered nurse competencies, the nephrology nurse at this level will:

1. Use the nursing care process in the management of patients presenting with kidney conditions.
2. Supervise and coordinate care in collaboration with other care providers and health team members to plan and provide quality care to patients with renal conditions.
3. Participate in kidney transplant evaluation.
4. Perform peri- and post- operative care for both donor and recipient as well as post-transplant care and follow-up.
5. Diagnose and manage or mitigate pre-dialysis, intra-dialysis and post dialysis emergencies.
6. Perform special procedures as per appendix 2.
7. Prepare, use and care for special equipment used in renal unit.
8. Supervise and perform renal dialysis therapy.
9. Identify, perform and participate in the rehabilitation of renal patients.
10. Participate in development and implementation of health nephrology programmes.

11. Initiate and participate in community primary health care in the promotion and prevention of kidney diseases.
12. Prescribe, perform and interpret laboratory investigations as per appendix 3.
13. Prescribe and administer medications during dialysis, transplant and in post-transplant.
14. Supervise and participate in the provision of palliative care of patients with kidney diseases.
15. Monitor and follow up on care provided to patients with nephrology conditions.
16. Provide psychosocial support, guide and educate patients, families, and communities on renal matters.
17. Manage nephrology services and facilities as well as training institutions.
18. Provide clinical mentorship to multidisciplinary team members in nephrology care units
19. Implement and evaluate curriculum related to nephrology nursing for diploma and higher diploma level.
20. Conduct and utilize and disseminate research findings to improve nephrology care.

2.3 MASTER OF SCIENCE IN NURSING- NEPHROLOGY

The nurse has a master's degree in nephrology nursing and has acquired nephrology nursing competencies to work at both operational and management level in the health care system. In addition to the registered nurse competencies, the nephrology nurse at this level will:

1. Use the nursing care process in the management of patients presenting with kidney conditions.
2. Supervise, coordinate and evaluate care in collaboration with other care providers and health team members to plan and provide quality care to patients with renal conditions.

3. Provide and supervise clinical mentorship in nephrology care units.
4. Supervise and participate in kidney transplant evaluation.
5. Supervise and perform peri- and post- operative care for the donor and recipient as well as post-transplant care and follow-up.
6. Guide in diagnoses and management or mitigation of renal emergencies.
7. Perform special procedures as per appendix 2.
8. Prepare, use and care for special equipment used in renal unit.
9. Prescribe renal dialysis therapy in consultation with relevant health team members.
10. Identify, supervise, plan, participate and evaluate rehabilitation of renal patients.
11. Design, implement and evaluate curriculum related to nephrology nursing for graduate and post graduate level.
12. Initiate and participate in community primary health care in the promotion and prevention of kidney diseases.
13. Prescribe, perform and interpret laboratory investigations as per appendix 3.
14. Prescribes and administer medications during dialysis, transplant and in post-transplant.
15. Supervise and participate in the provision of palliative care of patients with kidney diseases.
16. Initiate and develop policies in nephrology nursing.
17. Provide consultancy services in matters relating to kidney health.
18. Prescribe and adjust medications as indicated for the patient with kidney disease.
19. Manage nephrology services at all levels of health care.
20. Provide psychosocial support, guide and educate patients, families, and communities on renal matters.
21. Monitor and follow up on care provided to patients with nephrology conditions.

22. Implement curricula related to critical care at graduate and post graduate level
23. Design, implement and evaluate curriculum related to nephrology nursing for graduate and post graduate level.
24. Initiate, conduct, utilize and disseminate research findings to promote nephrology care.

Appendix 1: Comparative table

HIGHER DIPLOMA	POST GRADUATE DIPLOMA	MASTER
<p><i>In addition to the registered nurse competencies, the nephrology nurse at this level will:</i></p> <ol style="list-style-type: none"> 1. Use the nursing process in the management of patients presenting with kidney conditions. 2. Coordinate care in collaboration with other members of the multidisciplinary team to provide quality care to patients with renal conditions. 3. Monitor and follow up on care provided to patients with nephrology conditions. 4. Participate in kidney transplant evaluation. 5. Perform peri and post-operative care for both donor and recipient as well as post-transplant care and follow-up. 6. Diagnose and manage or mitigate pre-dialysis, intra-dialysis and post dialysis emergencies. 7. Perform special procedures as per appendix 2. 	<p><i>In addition to the scope of practice of the higher diploma, the post graduate nurse will:</i></p> <ol style="list-style-type: none"> 1. Perform special procedures as per appendix 2. 2. Supervise and perform renal dialysis therapy. 3. Initiate and participate in community primary health care in the promotion and prevention of kidney diseases. 4. Prescribe, perform and interpret laboratory investigations as per appendix 3. 5. Supervise and participate in the provision of palliative care of patients with kidney diseases. 6. Manage nephrology services and facilities as well as training institutions. 	<p><i>In addition to the scope of practice of the post graduate diploma, the master's nurse will:</i></p> <ol style="list-style-type: none"> 1. Provide and supervise clinical mentorship in nephrology care units. 2. Supervise and participate in kidney transplant evaluation. 3. Supervise and perform peri- and post- operative care for both donor and recipient as well as post-transplant care and follow-up. 4. Guide in diagnoses and management or mitigation of renal emergencies. 5. Perform special procedures as per appendix 2. 6. Prescribe renal dialysis therapy in consultation with relevant health team members.

<p>8. Prepare, use and care for special equipment used in renal unit.</p> <p>9. Perform renal dialysis therapy.</p> <p>10. Provide psychosocial support, guide and educate patients, families, and communities on renal matters.</p> <p>11. Identify, perform and participate in the rehabilitation of renal patients.</p> <p>12. Participate in implementation of health nephrology programmes.</p> <p>13. Undertake community primary health care in the promotion and prevention of kidney diseases.</p> <p>14. Prescribe, perform and interpret laboratory investigations as per appendix 3.</p> <p>15. Provide palliative care services to patients with kidney diseases.</p> <p>16. Prescribe and administer medications during dialysis, transplant and in post-transplant.</p> <p>17. Provide clinical mentorship to multidisciplinary team members in nephrology care units.</p> <p>18. Manage nephrology care services at hospital ward/unit level.</p>	<p>7. Implement and evaluate curriculum related to nephrology nursing for diploma and higher diploma level.</p> <p>8. Conduct and utilize and disseminate research findings to improve nephrology care.</p>	<p>7. Design, implement and evaluate curriculum related to nephrology nursing for graduate and post graduate level.</p> <p>8. Prescribe, perform and interpret laboratory investigations as per appendix 3.</p> <p>9. Initiate and develop policies in nephrology nursing.</p> <p>10. Provide consultancy services in matters relating to kidney health.</p> <p>11. Manage nephrology services at all levels of health care.</p> <p>12. Design, implement and evaluate curriculum related to nephrology nursing for graduate and post graduate level.</p> <p>13. Initiate, conduct, utilize and disseminate research findings to promote nephrology care.</p>
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19. Participate and utilize research findings to promote nephrology care.		
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Appendix 2

SCHEDULE OF SPECIALIZED PROCEDURES IN NEPHROLOGY NURSING

PROCEDURES	HIGHER DIPLOMA	POSTGRADUATE DIPLOMA	MASTERS
Perform screening procedures			
Order, interpret and utilize laboratory results BS, UECs, urinalysis, HB, hepatitis B, HIV			
CARE OF PATIENTS WITH END STAGE KIDNEY DISEASE			
Insertion of: Temporary catheters		A	A
Tunneled catheters			
Peritoneal dialysis catheter (Percutaneous insertion)			
Prescribe dialysis (Hemodialysis and peritoneal dialysis)		C	C
Creation of arterial venous fistula			
Care of dialysis access sites such as central venous catheters, arterial venous fistula or peritoneal dialysis catheters			

Prepare hemodialysis machine by lining and priming			
Perform dialysis either (HD or PD)			
Manage patients during dialysis			
Initiate intra dialysis blood transfusion			
Administer pre, intra and post dialysis medications			
Attend to intra and post dialysis complications			
Diagnose Cardio-pulmonary arrest & carry out resuscitation effectively as a team leader/ member			
Disconnect the patients from the dialysis machine			
Disinfect dialysis machine as per protocol			
Discharge the patient after haemo-dialysis			
Discharge the patient to continue with peritoneal dialysis and Follow up			
Order discharge of patients in the renal unit			
CARE OF KIDNEY TRANSPLANT PATIENTS			
Provide pre-transplant care			
Perform comprehensive patient assessment			
Prepare patients for Kidney transplant			
Prepare patients for kidney biopsy			
Provide intra- operative care			

Closely monitor, recognize and manage complications post kidney transplant			
Provide post-operative care			
Administer medication			
OTHER PROCEDURES			
Analyze and interpret various ECG rhythms and intervene appropriately			
Defibrillation			
Insertion of artificial airway			
Record and interpret 12-Lead ECG			
Prepare patients for transfer to wards or other hospitals			
Key			
Perform unassisted			
Perform with assistance			
Participate/ Assist in procedure			
Not applicable			
A	With additional training		
C	In consultation		

Appendix 3

LABORATORY & RADIOLOGICAL INVESTIGATIONS SCHEDULE

INVESTIGATIONS	HIGHER DIPLOMA	POSTGRADUATE DIPLOMA	MASTERS
ROUTINE TESTS			
Complete blood count (CBC)			
Urea/Electrolyte/Creatinine (U/E/C)			
Serum Urea Clearance			
Serum Creatinine Clearance			
Peritoneal Equilibration Test			
Urinalysis (dipstick)			
Blood sugar (RBS/FBS)			
Pregnancy test			
BASED ON PATIENT NEEDS			
Arterial blood gas (ABG)			
Coagulation profile (APTT, PTI)			
INR			
Liver function tests (LFTs)			
Bilirubin Levels	C		
Lipid profile	C		
Cultures (Blood, Urine, tracheal aspirate, catheter tip, pus swab)			
Bio-volumetric measurement	A	A	A
BMI			
Cardiac Triage (D-Dimers, Myoglobin, Troponin, CKMB, Pro BNP)	C	C	C
Procalcitonin			
C-Reactive protein (CRP)			
CSF studies			
Spirometry testing		C	C
HIV			
Hepatitis B&C			
Gene expert			
Thyroid function test			
Stool for ova, cyst			

Calculate eGFR			
Ferritin Level			
Renal Biopsy			
RADIOLOGICAL TESTS			
X-ray (chest, abdominal)	C	C	C
Echocardiogram	A	A	A
ECG			
Renal Doppler/Ultrasound	A	A	A
Kidney, Ureter & Bladder (KUB) x-ray		A	A
Ct Scan/MRI/PET	C	C	C
Key:			
Order interpret and utilize			
Interpret and utilize			
Order, Perform, interpret and Utilize			
Utilize			
A	With Additional Training can perform		
C	In consultation		

Appendix 4: Drug List Scheduling Considerations

The nephrology nurse shall be guided by the following: -

1. Work to the extent of training and certification, i.e. diploma, postgraduate diploma masters or PhD
2. Power to prescribe medications with different levels of Physician oversight.
 - Restricted
 - Reduced restrictions
 - Full practice autonomy

3. Individual qualification, experience and competence

The nephrology nurse shall prescribe / administer drugs & vaccines in line with the competencies, job description and institutional guidelines.

The nephrology nurse shall prescribe & or administer specific drugs in:

1. Consultation with the prescribing officer. The drugs shall be relevant to the ailment in question as per the pharmacodynamics and pharmacokinetics principles.
2. Emergency where her/his decision shall result in saving the life of the patient.
3. Situations where a nurse is licensed as a private practitioner, working in a public, family or community setting and the patient's condition warrants so.
4. Circumstances where patient is bleeding and requires urgent intervention to save life. The nephrology nurse shall prescribe and administer intravenous fluids, blood and blood products to stabilize the patient.
5. Cases where a patient with mental health challenges is in danger, or endangers the lives of others.
6. A case where a prescription has been given by the relevant prescribing officer

Medications that can be prescribed and administered by a nephrology nurse.

1. Anti-convulsant

2. Pain management
3. Relief of fever
4. Management of shock syndromes
5. Antidysrhythmic
6. Electrolyte imbalance
7. Fluids
8. Blood and blood products
9. Antibiotics
10. Anticoagulants
11. Antihypertensive
12. Erythropoietin stimulating agents
13. Topical ointments

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List of contributors	
Prof. Eunice Ndirangu- Mugo, MSc ANP PhD (Nursing studies)	Council Chairperson
Edna Tallam - Kimaiyo - CGN, BScN, MPH	Registrar/CEO, NCK
Alfred Obengo – RN	Chair, DSE committee, NCK
Margaret Muiyuro – RN ,RCCN, MPH	Member, DSE committee, NCK
Michael Nyongesa - RN, BSc,HSM	Member, DSE committee, NCK
Dr Joel Ngondi - EMBA, MPH, MBChB	Member, DSE committee, NCK
Dr. Judith Awinja, PhD (Health policy & strategic management)	Council member
Boniface Kimangau, RCHN, BScN	Council member
Mathew Kipturgor, BScN, MScN	Council member
Prof. Elijah Nyangena, BScN, MScN, PhD (Med edu)	Council member
Dr. Gladys Machira - BScN, PhD, MScN	Nursing Council of Kenya
Anne Mukuna - BScN, RCCN, MSc	Nursing Council of Kenya
Judith Kudoyi - RN, RM, RCCN, BSc (M.edu)	Nursing Council of Kenya
Branice Kisali – RN, BScN, MA M&E	Nursing Council of Kenya
Betina Muthama - RN, RPN, BScN, MHSM,	Nursing Council of Kenya
Nargis Kaka – RN, (PB) EMOC ,SMC	Nursing Council of Kenya
Felister Kamau - RN, BScN	Nursing Council of Kenya
Roselyne Koech - RN, KPN, Med edu	Nursing Council of Kenya
Grace Ngaruiya – BScN, Fellowship Nephrology, MSc Critical Crae, , PHD Nephrology	University of Nairobi School of Nursing Sciences
John Kwalimwa – BScN, MSc Critical care/Nephrology, PHD critical care	Kenyatta University School of Nursing Sciences
Anthony Chesire – RN, RNN	Moi Teaching and referral Hospital Renal Unit
Bernard Mwega – RN, BScN, RNN	NNAK
Diviner Nyarera – KRNN, BScN	Kenyatta National Hospital Renal Department
Komen Kimosop –RNN /BSHPE	Moi Teaching and Referral Hospital School of Nursing
Margaret Maywaka – BScN, RNN	Kenyatta National Hospital School of Nursing

Mary Chebon - RN, BScN, RNN	Kenyatta National Hospital School of Nursing
Nancy Wangombe – BScN, RNN	Kenyatta National Hospital -Renal Department
Rhodah Amunga - BScN, RNN	Kenyatta National Hospital School of Nursing
Florence Juma – RN, BScN ,RNN	The Nairobi Hospital – Renal unit
Matroba Obunaka – RN, BA Community, RNN	Kenyatta National Hospital - Renal Department



NURSING COUNCIL OF KENYA

P.O. Box 20056-00200, Nairobi, Kenya

Tel: +254 20 387 556 /

+254 721 920 569 /

+254 733 924 669

www.nckkenya.com
