

Chronic Kidney Disease Knowledge, Attitude and Practices (CKD-KAP) questionnaire

Hospital Name: _____

Country State / Province: _____

PART-I DEMOGRAPHICS

Age: Years

Clinical Experience Years

Gender: ☐ Male ☐ Female

Practice setting: ☐ Public ☐ Private ☐ Both

Level of Education: ☐ MBBS ☐ PG Trainee ☐ Consultant

Any special training of Nephrology/ CKD: ☐ Yes ☐ No

Have you read KDOQI / KDIGO guidelines for management of CKD? ☐ Yes ☐ No

Source of Information (For CKD) ☐ Books and guidelines ☐ Internet
☐ Special training ☐ CME activity

PART-II KNOWLEDGE ABOUT CKD

| Q# | Particulars | Yes | No | Don't know |
|-----|--|-----|----|------------|
| 1. | CKD is defined as abnormalities of kidney structure or function, present for >3 months, with implications for health | | | |
| 2. | The KDOQI guidelines have classified CKD based on GFR values in 5 classes (G1 to G5) | | | |
| 3. | The KDOQI guidelines have classified CKD based on albuminuria value in 3 classes (A1 to A3) | | | |
| 4. | According to the 2017 ACC/AHA guidelines the target blood pressure in CKD patients should be <130/80 mmHg and those with blood pressure >130 mmHg will be classified as hypertensive | | | |
| 5. | Is eGFR a better way of assessing decline in kidney function than elevated serum creatinine alone? | | | |
| 6. | Can age related reduction in eGFR without kidney disease lead to low eGFR with normal serum creatinine, normal urine analysis and normal USG? | | | |
| 7. | Cockcroft-gault equation is a better tool to estimate GFR than by MDRD equation* | | | |
| 8. | The KDIGO 2012 guidelines recommended classifying CKD based on cause, GFR category and albuminuria category | | | |
| 9. | Following are the risk factors which should be considered while predicting the CKD prognosis | | | |
| | a) Elevated blood pressure | | | |
| | b) Hyperglycemia | | | |
| | c) Dyslipidemia | | | |
| | d) History of cardiovascular disease | | | |
| | e) Chronic use of NSAIDs, lithium, cyclosporine | | | |
| | f) Glomerulonephritis | | | |
| 10. | Following are the complications for which every CKD patient should be continuously monitored | | | |
| | a) Anemia | | | |
| | b) Metabolic bone disease | | | |
| | c) Hyperkalemia | | | |
| | d) Acidosis | | | |
| | e) Edema | | | |
| | f) Acute Kidney Injury | | | |

| | | | | |
|-----|--|--|--|--|
| 11. | ACE inhibitors are the first line drugs in the management of CKD in both diabetic and non-diabetic patients | | | |
| 12. | All patients of CKD should be considered at high risk for developing Acute Kidney Injury (AKI) | | | |
| 13. | High protein diet should be administered to all CKD patients at risk of Acute Kidney Injury (AKI)* | | | |
| 14. | Guidelines recommend use of isotonic crystalloids fluids in CKD patients with AKI to keep the hydration status | | | |
| 15. | Dialysis should be initiated in CKD patients with AKI with abrupt changes in electrolytes and fluid | | | |
| 16. | Diuretics are recommended to improve kidney function in CKD patients with AKI* | | | |
| 17. | Anticoagulation therapy with enoxaparin or unfractionated heparin is recommended in AKI patients on dialysis (not at risk of bleeding) | | | |
| 18. | Iron therapy is recommended in CKD patients with anemia | | | |
| 19. | Erythropoietin therapy is not recommended at Hb > 10 g/dl | | | |
| 20. | IV Iron dextran should be continued in CKD patients with anemia having systemic infection* | | | |
| 21. | Phosphate lowering therapy with phosphate binders is recommended in CKD patients at risk of mineral and bone disorders | | | |
| 22. | The dose of calcium based phosphate binders should be restricted in G3a-G5 stage CKD patients | | | |
| 23. | In CKD G5 stage patients with hyperparathyroidism calcitriol is not recommended* | | | |
| 24. | KDOQI guidelines for dialysis have recommended that initiating dialysis on stage 4 patients with GFR <30ml/min may yield better clinical outcomes and low mortality rate | | | |
| 25. | Anticonvulsant drugs valproic acid is dialyzable and thus require additional dose after dialysis* | | | |
| 26. | Loading doses do not needs adjustments in CKD patients | | | |
| 27. | Reduction in dose without changing the dosing interval may be associated with LOWER risk of toxicities* | | | |
| 28. | Lengthening the dosing interval without changing the dose is associated with higher risk of subtherapeutic drug concentrations | | | |
| 29. | ACE inhibitors should be discontinued if the serum creatinine rise by more than 30% | | | |
| 30. | Metformin can be administered to stage 5 CKD patients with GFR < 15ml/min* | | | |

PART-III ATTITUDE TOWARDS CKD

Answer the following questions according to 5-point Likert Scale defined below

| | | | | |
|-------------------|----------|----------|----------|----------------|
| Strongly disagree | Disagree | Neutral | Agree | Strongly agree |
| 1 | 2 | 3 | 4 | 5 |

| Q # | Statement | 1 | 2 | 3 | 4 | 5 |
|--------------------------------------|--|---|---|---|---|---|
| General attitudes towards CKD | | | | | | |
| 1. | Dose of all renally excreted drugs should not be adjusted to prevent toxicities in CKD patients* | | | | | |
| 2. | Every CKD patient on dialysis should be regularly screened for hepatitis | | | | | |
| 3. | Prescribing in line with the latest guidelines can improve clinical outcomes | | | | | |
| 4. | Early diagnosis of CKD can prevent all-cause mortality | | | | | |
| 5. | Physicians should study the latest clinical guidelines to provide better clinical services. | | | | | |
| 6. | Clinical pharmacist can help improve clinical outcomes and reduce toxicities in CKD patients | | | | | |
| Kidney damage and outcomes | | | | | | |
| 7. | Providing dietary counseling to CKD patients is not required* | | | | | |
| 8. | Every CKD patient should be considered at high risk of acute kidney injury | | | | | |
| 9. | Drugs cannot cause kidney damage* | | | | | |
| 10. | More research is required to determine factors affecting clinical outcomes in CKD patients in Pakistan | | | | | |
| 11. | CKD patients should not administer herbal and alternate medicine | | | | | |
| Dialysis | | | | | | |
| 12. | Dialysis facilities for hepatitis C should be kept separate | | | | | |
| 13. | Drug therapy of CKD patients should be reviewed after initiation of dialysis | | | | | |

PART-IV PRACTICES ABOUT CKD

Answer the following questions according to 4-point Likert Scale defined below

| | | | |
|----------|----------|----------|----------|
| Never | Seldom | Often | Always |
| 1 | 2 | 3 | 4 |

| Q # | Statement | 1 | 2 | 3 | 4 |
|----------------------------------|---|---|---|---|---|
| General practices for CKD | | | | | |
| 1. | Do you refer your CKD patients to nephrologist at stage G5?* | | | | |
| 2. | Do you use serum creatinine to adjust medication doses in CKD patients?* | | | | |
| 3. | Do you review the drug therapy of your CKD patients for potential Drug Related Problems (DRP's) and interactions? | | | | |
| 4. | Do you provide dietary counseling to your CKD patients? | | | | |
| Monitoring of CKD | | | | | |
| 5. | Do you routinely measure urine protein (albumin) in your CKD patients? | | | | |
| 6. | Do you monitor Iron, RBC and hemoglobin of your CKD patients for anemia after every 3 months? | | | | |
| Measurement of GFR | | | | | |
| 7. | Do you use MDRD equation for calculating GFR from serum creatinine? | | | | |
| 8. | Do you diagnose and stage your CKD patients based on serum creatinine instead of GFR values?* | | | | |
| Complications of CKD | | | | | |
| 9. | Do you recommend your CKD patients to undergo Bone Mineral Density (BMD) scan for determining osteoporosis? | | | | |
| 10. | Do you routinely monitor calcium, phosphorous and PTH levels in CKD patients? | | | | |

THANK YOU