

COMPREHENSIVE PEDIATRIC AKI STUDY QUESTIONNAIRE

SECTION 1: PATIENT IDENTIFICATION AND DEMOGRAPHIC INFORMATION

Hospital Enrolled

- ☐ Kibagabaga District Hospital
- ☐ Muhima District Hospital
- ☐ Kacyiru District Hospital
- ☐ Byumba District Hospital
- ☐ Ruhengeri Level II Teaching Hospital
- ☐ Kibuye Referral Hospital

Date of Enrollment

yyyy-mm-dd

Data collector Name

- ☐ IRENE
- ☐ JEANNETTE
- ☐ JOY
- ☐ VAINQUEUR
- ☐ Other

STUDY ID

Date of birth

yyyy-mm-dd

Gender

- ☐ Male
- ☐ Female

Weight at admission

Height /length in cm

District of residence

Sector of Residence

Social economic categories

- ☐ UBDEHE CAT 1
- ☐ UBDEHE CAT 2
- ☐ UBDEHE CAT 3
- ☐ UBDEHE CAT 4
- ☐ NOT MENTIONED

Insurance status

- ☐ Mutuelle de Santé
- ☐ ☐ RAMA
- ☐ ☐ MMI
- ☐ ☐ Private insurance
- ☐ ☐ No insurance
- ☐ ☐ Other:

Date of admission

yyyy-mm-dd

Date of AKI Diagnosis

Time of Admission (24 hour format)

Mode of arrival

- ☐ ☐ Self-referral
- ☐ ☐ Health center referral
- ☐ ☐ District hospital referral
- ☐ ☐ Other hospital referral
- ☐ ☐ Emergency transfer
- ☐ Counter referral
- ☐ Others

Primary complaint:

- ☐ Fever
- ☐ Vomiting
- ☐ Diarrhea
- ☐ Reduced urine outputs
- ☐ Generalised body swelling / edema
- ☐ abdominal swelling
- ☐ facial swelling
- ☐ lower limb swelling
- ☐ Difficulty Breathing
- ☐ Altered Consciousness/ mental status
- ☐ Seizures
- ☐ cough
- ☐ chest pain
- ☐ hemoptisis
- ☐ abdominla pain
- ☐ muscle weakness
- ☐ generalized body weakness
- ☐ headache
- ☐ dark urine
- ☐ vomiting blood
- ☐ epistaxis
- ☐ Others

Associated conditions

- ☐ pneumonia
- ☐ malaria
- ☐ acute gastroenteritis
- ☐ sepsis
- ☐ meningitis
- ☐ meningoencephalitis
- ☐ multiorgan dysfunction
- ☐ trauma
- ☐ traditional medication use
- ☐ shock (septic, cardiogenic)
- ☐ shock Hypovolemic
- ☐ nephrotic/ nephritic syndrome
- ☐ acute glomerulonephritis
- ☐ Pharyngitis
- ☐ Others

Comorbidities

- ☐ Diabetes mellitus
- ☐ congenital renal anomalies
- ☐ hypertension
- ☐ malignancies
- ☐ sickle cell disease
- ☐ heart failure
- ☐ severe malnutrition
- ☐ liver failure
- ☐ congenital heart disease
- ☐ hemophilia
- ☐ Others

Duration of Symptoms Before Seeking Care

• Duration of symptoms before first healthcare contact: _ days

Vitals sign on admission

Temperature

Heart rate (beats/min)

Respiratory rate: _ breaths/min

Blood pressure: / mmHg

• Oxygen saturation: _% on ☐ Room air ☐ Oxygen support

Hydration status

- ☐ Well hydrated
- ☐ Some dehydration
- ☐ Severe dehydration
- ☐ not mentioned

signs of dehydration

- ☐ ☐ Dry mucous membranes
- ☐ ☐ Sunken eyes
- ☐ ☐ Reduced skin turgor
- ☐ ☐ Delayed capillary refill (>2 seconds)
- ☐ ☐ Cool extremities
- ☐ ☐ None of the above

Urine output Assessment

- ☐ ☐ Normal (>1 ml/kg/hour)
- ☐ ☐ Reduced (0.5-1 ml/kg/hour)
- ☐ ☐ Oliguria (<0.5 ml/kg/hour)
- ☐ ☐ Anuria (<0.3 ml/kg/hour or no urine for >12 hours)
- ☐ Not mentioned

Method of urine measurement

- ☐ □ Urinary catheter
- ☐ □ Urine collection bag
- ☐ □ Diaper weighing
- ☐ □ Estimated by caregiver
- ☐ □ Not measured

Clinical Signs and Symptoms

Neurological status

- ☐ □ Alert
- ☐ □ Responds to voice
- ☐ □ Responds to pain
- ☐ □ Unresponsive
- ☐ □ Not assessed/ mentioned

• **Glasgow Coma Scale: E V M Total:**

Previous hospital admissions

- ☐ □ Yes
- ☐ □ No

☐ □ Unknown If yes, reason and date: _

• **Previous episodes of AKI**

- ☐ □ Yes
- ☐ □ No

☐ □ Unknown If yes, reason and date: _

AKI Risk Factors mentioned

- ☐ Recent infection
- ☐ Recent surgery
- ☐ Recent trauma
- ☐ Exposure to nephrotoxic agents in the past 14 days: NSAIDs, Aminoglycosides, Contrast media, Traditional medicines
- ☐ None of above

Unknown If yes, reason describe and date: _

Previous baseline creatinine available

- ☐ Yes
- ☐ No

If yes, value: _ mg/dl or _ μ mol/L, Date: //_ _

Admission laboratory values

Amount

Unit of measurement

Was it measured

Serum Creatine

- ☐ Yes ☐ Not mentioned

Blood glycemia

☐ Yes ☐ Not mentioned

Bicarbonate

☐ Yes ☐ Not mentioned

Chloride

☐ Yes ☐ Not mentioned

ALT

☐ Yes ☐ Not mentioned

Phosphorus

☐ Yes ☐ Not mentioned

Blood urea nitrogen (BUN)

☐ Yes ☐ Not mentioned

Serum albumin

☐ Yes ☐ Not mentioned

AST

☐ Yes ☐ Not mentioned

Sodium

☐ Yes ☐ Not mentioned

C-reactive protein

☐ Yes ☐ Not mentioned

Potassium

☐ Yes ☐ Not mentioned

Hemoglobin

☐ Yes ☐ Not mentioned

Calcium

☐ Yes ☐ Not mentioned

LDH

☐ Yes ☐ Not mentioned

White Blood Cell count

☐ Yes ☐ Not mentioned

Platelet count

☐ Yes ☐ Not mentioned

Malaria test

- ☐ Positive
- ☐ Negative
- ☐ Not done

Blood culture

- ☐ Positive
- ☐ Negative
- ☐ Not done

If positive, organism: _

Urine dipstick performed

- ☐ Yes
- ☐ no

VALUES

Value obtained

Blood

- ☐ Negative ☐ 3+ ☐ Trace ☐ 2+ ☐ 1+ ☐ 4+

Glucose

- ☐ Negative ☐ 3+ ☐ Trace ☐ 2+ ☐ 1+ ☐ 4+

Nitrites

- ☐ Negative ☐ 3+ ☐ Trace ☐ 2+ ☐ 1+ ☐ 4+

Leukocytes

☐ Negative ☐ 3+ ☐ Trace ☐ 2+ ☐ 1+ ☐ 4+

Protein

☐ Negative ☐ 3+ ☐ Trace ☐ 2+ ☐ 1+ ☐ 4+

Urine microscopy

☐ Yes
☐ No

If yes, findings: _

Ultrasound performed

☐ yes
☐ no
☐ not mentioned

findings

other imaging

☐ Chest X ray
☐ CT Scan
☐ Other imaging
☐ none

if other specify

• AKI diagnosed based on

☐ ☐ Increase in serum creatinine by ≥ 0.3 mg/dl within 48 hours ☐ Increase in serum creatinine to ≥ 1.5 times baseline within 7 days

☐ ☐ Urine output < 0.5 ml/kg/hour for 6 hours

☐ Multiple criteria

☐ Not mentioned

AKI Staging at Diagnosis (KDIGO)

- ☐ ☐ Stage 1: SCr 1.5-1.9 times baseline OR ≥ 0.3 mg/dl increase OR urine output < 0.5 ml/kg/h for 6-12h
- ☐ ☐ Stage 2: SCr 2.0-2.9 times baseline OR urine output < 0.5 ml/kg/h for ≥ 12 h
- ☐ ☐ Stage 3: SCr 3.0 times baseline OR increase to ≥ 4.0 mg/dl OR initiation of RRT OR urine output < 0.3 ml/kg/h for ≥ 24 h OR anuria for ≥ 12 h
- ☐ ☐ no staging done

Time of AKI Diagnosis

- ☐ • AKI present on admission
- ☐ • AKI developed during hospitalization
- ☐ • not specified

If yes, days after admission: _

Probable Etiology of AKI

- ☐ ☐ Pre-renal (hypovolemia, shock, heart failure)
- ☐ ☐ Intrinsic renal: ☐ Acute tubular necrosis ☐ Glomerulonephritis ☐ Hemolytic uremic syndrome ☐ Interstitial nephritis
- ☐ ☐ Post-renal (obstruction) ☐ Multifactorial ☐ Unknown
- ☐ NOT MENTIONED

Initial management

- ☐ Fluid resuscitation
- ☐ Diuretics used
- ☐ Antibiotics initiated
- ☐ Needed mechanical ventilation
- ☐ Vasopressors/inotropes
- ☐ None of above mentioned

if above provide details (Type: ☐ Normal saline ☐ Ringer's lactate ☐ Other: _ o Volume in first 24 hours: _ ml/kg • Diuretics used: ☐ Yes ☐ No If yes: o Type: ☐ Furosemide ☐ Other: _ o Initial dose: _ mg/kg o Route: ☐ IV ☐ Oral

Which medication used

AKI-Specific Management

- ☐ •Nephrotoxic medication discontinued
- ☐ •Dose adjustments for medications
- ☐ •Nutritional support
- ☐ Not mentioned

Renal Replacement Therapy (RRT) indicated

- ☐ Yes
- ☐ No
- ☐ Not mentioned

If yes

- ☐ RRT received
- ☐ If not received despite indication, reason

If RRT Received state o Type: ☐ Peritoneal dialysis ☐ Hemodialysis ☐ CRRT **o Date initiated:** // _ o **Duration:** _ days

If not received state the reason

Discharge Details

• Date of discharge/death

yyyy-mm-dd

Discharge status

- ☐ Alive
- ☐ Deceased
- ☐ Referred to another hospital

If deceased (primary cause of death and contributing factor)

Was AKI a direct or contributing cause

- ☐ Yes
- ☐ NO
- ☐ Unknown

Final diagnosis (related to AKI)

Final serum creatinine

Renal recovery status

- ☐ ☐ Complete recovery ($\text{SCr} \leq \text{baseline}$)
- ☐ ☐ Partial recovery ($\text{SCr} < \text{diagnosis level but} > \text{baseline}$)
- ☐ ☐ No recovery ($\text{SCr} \geq \text{diagnosis level}$ or still requiring RRT)

Discharge medications

Nephrology follow up arranged

- ☐ Yes
- ☐ No