

## APPENDIX IV: QUESTIONNAIRE

Hyperglycemia in severe Traumatic Brain Injury and its association with thirty-day mortality in  
Mulago National Referral Hospital (MNRH), Uganda

**Fill in the available spaces or tick appropriately**

Code NO.		Date		
1. Age :.....( in yrs.)		2.	Sex: a)Male	b) Female
3. Address:.....		4.	Occupation ( specify):	
Phone No.1	Phone No.3	.....		
Phone No.2				
<b>5.Marital status</b>		<b>6. Cause of TBI</b>		
a)Single		a) RTA		
b)Married		b) Falls		
c)Widowed		c) Assault		
d)Divorced		d) Domestic violence		
		e) Work related		
<b>7. Who brought the patient to Hospital?</b>		<b>8. Mode of arrival</b>		

a) Police		a) Ambulance	b) Police Pick-up
b) Nurse from referral site		c) Private vehicle	d) Public vehicle
c) Well-wishers		e) Motorcycle	f) Bicycle
d) Attendants		g) Other(Specify)	
e) Other(Specify)			
<b>9. Time between injury and arrival to Hospital</b>		<b>10. Pre-hospital treatment</b>	
		a. Oxygen	b. IV fluids

a. <1hr	b. 1-6hrs	c. Mannitol	d. Antibiotics
c. 6- 12hrs	d. 12-24hr	e. Analgesia	f. Intubation
e. 24-48hrs	f. >48hrs	g. Steroids	h. Glucose
<b>11.Long term illness</b>			
a. Diabetes Mellitus	b. Hypertension	c. Chronic Renal Disease	d. Chronic disease liver
e. Others			
<b>12. Chronic medication</b>			
a. Steroid therapy	b. Hypoglycemia agents	c. Antihypertensive	d. others
<b>13.Substance abuse</b>			
a. Alcohol	b. Cigarette smoking	c. Cocaine	d. Others

i. Other (specify).....

<b>11.Vomiting:Yes          No</b>		<b>12. Convulsions: Yes          No</b>	
<b>13.Post-resuscitation GCS</b>		<b>14. Pupillary response and size</b>	
	<b>Total</b>		
a. Eye opening			a. Normal
a. Verbal Response b. Motor response			b. Dilated right pupil
Systolic BP (mmHg) <90	>90		
Pulse Rate/min			c. Dilated left pupil
Respiratory Rate /min Temperature (°C) Oxygen saturation(SpO <sub>2</sub> ) <90%	>90%		

<b>15.RBSmmol/L</b> a. At Admission b. After 24hrs		<b>16. HBA1c</b>
<b>17. CSF Leak</b>		<b>18. Limb weakness</b>
a)Nose Both R/L		a)Upper limbs RL
b)Ear Both R/L		b)Lower limbs RL
<b>19.Peri-orbital ecchymosis</b> Yes No		<b>22. Fractures</b> (Specify the site)
<b>20.Abdominal injury</b> (specify)		<b>23. Facial fracture</b>
<b>21.Chest injury</b> (specify)		<b>24. Neck stiffness</b> Yes No
<b>25.Laboratory parameters</b>		<b>26. Time between admission and surgery</b>
a. Hemoglobin (Hb)		a) <6hrs
b. Serum sodium		b) 6-24hrs
c. Serum potassium		c) 24-48hrs
<b>27.Cause of delay</b>		<b>28. Findings at surgery</b>
a) Lack of supplies  b) Lack of theatre space		a) Subdural hematoma b)Epidural hematoma c) Brain edema d) Contusion e) Laceration
c) Later development of features of raised ICP		f) Other(Specify

<p><b>29. Surgery done</b></p> <p>a) Decompressive craniectomy</p> <p>b) Osteoplastic decompressive craniotomy</p> <p>c) Duroplasty</p>	<p><b>30. Other surgical intervention</b></p> <p>i) Tracheostomy</p> <p>ii) Thoracostomy</p> <p>iii) Laparotomy</p> <p>iv) Fracture management</p> <p>v) Other (Specify)</p>
<p><b>31. ICU</b></p> <p>Number of days on ventilation</p> <p>GCS at discharge from ICU</p> <p>a. Motor response</p> <p>b. Eye opening</p> <p>c. Verbal response</p> <p>Death in ICU</p>	<p><b>32. Laboratory parameters in ICU</b></p> <p>a. Hemoglobin (Hb)</p> <p>b. Glucose (mmol/L)</p> <p>c. Serum sodium</p> <p>d. Serum potassium</p> <p>e. Urea</p> <p>f. Creatinine</p>
<p><b>33. Emergency/Ward 1</b></p> <p>a. Wound infection</p> <p>b. Extradural CSF leak</p> <p>c. Meningitis</p> <p>d. Swelling at the operation site</p> <p>e. Abscess</p>	<p><b>34. status at 30 days</b></p> <p>a. Alive</p> <p>b. Dead</p>

### APPENDIX III: GLASGOW COMA SCALE

Parameter	Response	Score
Eye opening	None	1
	To pain	2
	To speech	3
	spontaneously	4
Verbal Response	None	1
	Incomprehensible sounds	2
	Inappropriate words	3
	Confused	4
	Well Oriented	5
Motor Response	None	1
	Abnormal extension	2
	Abnormal Flexion	3
	Withdraws from pain(normal flexion)	4
	Localizes pain	5
	Obeys commands	6