Questionnaire / Data Collection Form

Prevalence of Emergency versus Elective Cesarean Sections and Associated Feto-Maternal Outcomes: A Hospital-Based Cross-Sectional Study at Dongola Maternity Hospital, Northern State, Sudan, 2026

Instructions for Data Collectors

- Complete one form for each eligible woman who underwent cesarean section at Dongola Maternity Hospital during the study period.
- Use direct interview or medical records (obstetric admission records, operation theater logs, neonatal records, discharge summaries) to extract data.
- Tick (✓) the appropriate box or write the value in the space provided.
- All information collected will be kept strictly confidential and anonymized.

Section A: Identification & Demographic Data

No.	Variable	Response
A1	Date of Admission	_____ (d/m/y)
A2	Date of Delivery	_____ (d/m/y)
A3	Age (years)	_____
A4	Residence	☐ Urban ☐ Rural
A5	Parity	_____
A6	Gravidity	_____
A7	Gestational age at delivery (weeks)	_____

Section B: Obstetric & Medical History

No.	Variable	Response
B1	Gestational diabetes mellitus	☐ Yes ☐ No
B2	Hypertensive disorders (PIH / preeclampsia / eclampsia)	☐ Yes ☐ No
B3	Previous cesarean section(s)	☐ Yes ☐ No
B4	Number of previous cesarean sections	_____
B5	Previous bad obstetric history	☐ Yes ☐ No
B6	Antenatal care visits (number)	_____
B7	Other medical conditions (specify)	_____

Section C: Type of Cesarean Section

No.	Variable	Response
C1	Type of cesarean section	☐ Emergency ☐ Elective
C2	If emergency, category	☐ Category 1 (immediate threat to life) ☐ Category 2 (compromise not immediately life-threatening)
C3	If elective, was it planned before onset of labor?	☐ Yes ☐ No

Section D: Indications for Cesarean Section

No.	Indication	Tick if applicable
D1	Contracted pelvis	☐
D2	Failure of progress / prolonged labor	☐
D3	Pregnancy-induced hypertension / preeclampsia / eclampsia	☐
D4	Fetal distress	☐
D5	More than one previous scar	☐
D6	Malpresentation (breech, transverse, etc.)	☐
D7	Placenta previa	☐
D8	Abruptio placentae	☐
D9	Cord prolapse	☐
D10	Bad obstetric history	☐
D11	Multiple scars	☐

D12	Cephalopelvic disproportion	☐
D13	Maternal Request	
D14	Other (specify): _____	☐

Section E: Maternal Outcomes

No.	Variable	Response
E1	Need for blood transfusion	☐ Yes ☐ No
E2	Post-operative wound infection	☐ Yes ☐ No
E3	Bladder injury	☐ Yes ☐ No
E4	Endometritis	☐ Yes ☐ No
E5	Postpartum hemorrhage	☐ Yes ☐ No
E6	Cesarean hysterectomy	☐ Yes ☐ No
E7	Duration of hospital stay (days)	_____
E8	Maternal mortality	☐ Yes ☐ No
E9	Other maternal complications (specify)	_____

Section F: Neonatal Outcomes

No.	Variable	Response
F1	Birth weight (grams)	_____
F2	APGAR score at 1 minute	_____
F3	APGAR score at 5 minutes	_____
F4	Birth asphyxia (APGAR < 7 at 5 minutes)	☐ Yes ☐ No
F5	NICU admission (within 24 hours of birth)	☐ Yes ☐ No
F6	Respiratory distress syndrome	☐ Yes ☐ No
F7	Perinatal mortality (death from 28 weeks gestation to 7 days after birth)	☐ Yes ☐ No
F8	Other neonatal complications (specify)	_____

Operational Definitions (for Data Collectors)

Term	Definition
Emergency cesarean	Cesarean performed due to acute maternal or fetal compromise requiring immediate delivery
Elective cesarean	Planned cesarean performed before the onset of labor
Birth asphyxia	APGAR score < 7 at 5 minutes
NICU admission	Admission to neonatal intensive care unit within 24 hours of birth
Displaced woman	Woman who fled her place of residence due to conflict and currently resides in Northern State
Perinatal mortality	Death of fetus or neonate from 28 weeks gestation to 7 days after birth