UNIVERSITY OF HEALTH SCIENCES

FACULTY OF NURSING – DONGOLA BRANCH

RESEARCH PROPOSAL

Maternal Mortality Due to Preeclampsia and Eclampsia at Dongola Maternity Teaching Hospital

Prepared by: .....

Supervisor: .....

Proposed study period: August–September 2026

1. Introduction

Maternal mortality is an important indicator of maternal health and the quality of obstetric care. Hypertensive disorders of pregnancy, including preeclampsia and eclampsia, can lead to serious complications when they are not recognized and managed promptly. These complications may include seizures, stroke, HELLP syndrome, acute kidney injury, pulmonary edema, placental abruption, and maternal death. This study will examine maternal mortality due to preeclampsia and eclampsia at Dongola Maternity and Obstetrics Teaching Hospital by reviewing eligible medical records during the specified period.

2. Problem Statement

Despite the importance of early detection and appropriate management of preeclampsia and eclampsia, severe maternal outcomes may still occur. There is a need to describe maternal deaths associated with these conditions at Dongola Maternity and Obstetrics Teaching Hospital and review demographic, obstetric, and clinical factors documented in hospital records.

3. Significance of the Study

The study may provide local information about cases of preeclampsia and eclampsia and their recorded outcomes. It may help identify areas requiring further attention in obstetric care and support efforts to improve early detection, referral, and management.

4. Objectives

4.1 General Objective

To examine maternal mortality due to preeclampsia and eclampsia at Dongola Maternity and Obstetrics Teaching Hospital.

4.2 Specific Objectives

• To describe the demographic and obstetric characteristics of included cases.

• To identify the recorded outcomes, including survival or death.

• To describe complications documented among cases of preeclampsia and eclampsia.

• To review selected aspects of documented care and clinical management.

• To provide recommendations based on the findings to support improved maternal care.

5. Research Questions

• What are the demographic and obstetric characteristics of included cases?

• What outcomes are recorded among cases of preeclampsia and eclampsia?

• What complications are documented among these cases?

• What aspects of care and clinical management are documented in the records?

6. Methodology

6.1 Study Design

A descriptive study based on reviewing hospital records and available medical information for cases meeting the inclusion criteria. The final design should be confirmed with the supervisor and relevant authorities.

6.2 Study Setting

Dongola Maternity and Obstetrics Teaching Hospital, Dongola, Sudan.

6.3 Study Period

The proposed study period is August to November 2026. It should be confirmed that this period matches the actual period of record review and the official permissions granted.

6.4 Study Population

Medical records of cases diagnosed with preeclampsia or eclampsia that meet the inclusion criteria during the specified period. Both surviving and deceased cases may be included to describe outcomes among eligible cases.

6.5 Inclusion and Exclusion Criteria

Proposed inclusion criteria: available medical records of cases diagnosed with preeclampsia or eclampsia during the specified period, containing the basic information required for the study. Proposed exclusion criteria: duplicate records, records where the diagnosis cannot be verified, or records missing essential information. These criteria should be approved by the supervisor before data collection.

6.6 Sample Size and Sampling Technique

The final sample size has not yet been approved and remains subject to review by the supervisor. Cochran's formula using a proportion from a previous study in Gedaref has been discussed; however, the meaning of the reported 32% and its suitability for this research objective must be verified before using it in the calculation. The number of eligible records available at the hospital should also be considered. The final sample size and sampling technique will be specified after confirmation of the source, calculation, and availability of eligible records.

6.7 Data Collection Tool

A structured data collection form will be used to extract relevant information from medical records. It may include demographic and obstetric characteristics, diagnosis, documented clinical signs and measurements, complications, treatments, mode of delivery, referral or intensive care admission, and maternal outcome.

6.8 Data Collection Procedure

After obtaining the required permissions, eligible records will be reviewed and relevant information entered into the data collection form. Patients' names and direct personal identifiers will not be recorded in the research dataset. Forms will be checked for missing information and duplication before data entry.

6.9 Data Analysis

Data will be analyzed using methods appropriate to the variables. Categorical variables may be summarized using frequencies and percentages, while numerical variables will be described using suitable summary measures. The statistical software and final analysis plan will be determined with the supervisor.

6.10 Ethical Considerations

Data collection will not begin until required approvals have been obtained from the university, relevant health authorities, hospital administration, and any required ethics committee. Confidentiality will be maintained, and direct identifiers will not be included in the research dataset. Information will be used for academic research only.

7. Proposed Work Plan

This preliminary plan may be adjusted according to approvals, the supervisor's guidance, and access to records. It does not imply that any activity has already been completed.

8. Expected Results

The study is expected to describe the characteristics, outcomes, documented complications, and recorded aspects of care among included cases. It may provide local information to help identify areas for improvement. No numerical findings are assumed before data collection and analysis.

9. Limitations of the Study

The findings may be affected by the completeness and accuracy of medical records. The study setting and period may limit generalizability to other health facilities.

10. References

Insert the references actually used in Chapters One and Two after checking their bibliographic details and standardizing the referencing style. Each reference should be verified and matched with in-text citations before final submission. The original reference list from Chapters One and Two still needs to be inserted in this draft.

11. Request for Permission to Collect Research Data

To: The Authorized Official

Ministry of Health – Northern State, Sudan

Subject: Request for Permission to Collect Data for an Academic Research Project

Dear Sir/Madam,

We are nursing students at the University of Health Sciences, Faculty of Nursing – Dongola Branch. We respectfully request permission to collect data from the medical records of Dongola Maternity and Obstetrics Teaching Hospital for our academic research project entitled:

"Maternal Mortality Due to Preeclampsia and Eclampsia at Dongola Maternity Teaching Hospital."

Data will be collected in accordance with required approvals and procedures. Confidentiality will be maintained, no patient names or direct identifiers will be recorded, and the information will be used for academic research purposes only.

We would be grateful for your consideration and approval of this request. Thank you for your time and support.

Yours faithfully,

Researchers' names: .....

Supervisor: .....

Date: .....

Signature: .....

Stage	Activity	Proposed timing
1	Review and approval of the proposal by the supervisor and university	August 2026 / subject to approval
2	Obtain Ministry of Health approval, hospital permission, and required ethics approval	August–September 2026 / subject to procedures
3	Identify records meeting the inclusion criteria	After permissions are granted
4	Collect data using the data collection form	August–September 2026
5	Check, code, and enter data	September–October 2026
6	Analyze data and prepare results	October–November 2026
7	Write and review the final report with the supervisor	November 2026 or later if needed