

Maternal and Perinatal Outcome of Eclampsia in a Tertiary Care Centre**Bhagyashree¹, Pratima²**¹Senior Resident, Department of Obstetrics & Gynaecology, Sri Krishna Medical College and Hospital Muzaffarpur, Bihar, India²Associate Professor & HOD, Department of Obstetrics & Gynaecology, Sri Krishna Medical College and Hospital Muzaffarpur, Bihar, India

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Abstract:**Background:** Eclampsia is a serious obstetric emergency and a leading cause of morbidity and mortality among mothers and new-borns, particularly in developing nations. In the Indian state of Bihar, where the healthcare system regularly falls short of meeting the demands of a dense rural population, the prevalence of eclampsia is disproportionately high.**Objectives:** The primary objective of this study was to evaluate the sociodemographic characteristics and clinical profile of women who presented with eclampsia. Secondary objectives included assessing perinatal outcomes and investigating the specific causes of maternal illness and mortality in order to identify flaws in the current healthcare delivery system.**Methods:** Over the course of a year, this prospective observational study was carried out at Sri Krishna medical college and hospital, Bihar. 100 women having an eclampsia diagnosis were included in the study. Analysis was done on clinical presentation, delivery method, and feto-maternal complications.**Results:** Young primigravidae had the highest incidence (64%), with an astounding 70% of referrals being unbooked. The most common presentation was antepartum eclampsia (68%). In 66% of instances, a cesarean section was necessary. Postpartum hemorrhage and Pulmonary edema were the two main maternal consequences. The rate of maternal death was 5%. With a high incidence of low birth weight (60%) and a perinatal mortality rate of 52%, perinatal outcomes were compromised.**Conclusion:** Mothers and new-borns are continuing to suffer greatly from eclampsia. To improve results, early diagnosis, sufficient prenatal care, prompt referral, and standardised management procedures are crucial. To stop eclampsia and its terrible effects, targeted community and primary healthcare initiatives are required.**Keywords:** Eclampsia, pre-eclampsia, perinatal morbidity, maternal morbidity, Stillbirth.**DOI:** 10.25258/ijcpr.18.1.213This is an Open Access article that uses a funding model which does not charge readers or their institutions for access and distributed under the terms of the Creative Commons Attribution License (<http://creativecommons.org/licenses/by/4.0>) and the Budapest Open Access Initiative (<http://www.budapestopenaccessinitiative.org/read>), which permit unrestricted use, distribution, and reproduction in any medium, provided original work is properly credited.**Introduction**

Eclampsia, which is characterised as seizures in pre-eclamptic women without other neurological reasons, continues to be a major source of maternal and neonatal morbidity and mortality, especially in low- and middle-income nations [1]. Due to delayed referrals, insufficient prenatal surveillance, and restricted access to emergency obstetric treatment, eclampsia remains a significant public health concern despite advancements in prenatal care and the availability of anticonvulsant therapy [2]. The goal of the current study was to assess the perinatal and maternal outcomes of eclampsia in a tertiary care facility and to pinpoint related problems.

Methods

This one-year retrospective observational study was carried out in a Sri Krishna medical college and hospital, Bihar. The study included all women with

antepartum, intrapartum, or postpartum eclampsia diagnoses. Women who experienced seizures as a result of epilepsy or other illnesses were not included.

Study Duration: The study was conducted over a period of 12 months from August 2023-July 2024.**Participants:** A total of 100 female patients were selected for this study.

Demographic information, prenatal booking status, gestational age at presentation, type of eclampsia, mode of delivery, maternal difficulties, and perinatal outcomes were all gathered from hospital records. Standard institutional procedures, such as magnesium sulphate therapy and hypertension medication, were followed in the management of every patient. Descriptive statistics were used to

analyse the data, which were then displayed as frequencies and percentages.

Results

A considerable percentage of obstetric admissions throughout the research period were due to

eclampsia. Young primigravidae and unbooked cases made up the bulk of the patients. Most frequently, antepartum eclampsia was seen is represented in table 1. The most common delivery method was caesarean section (table 2).

Table 1: Demographic and Obstetric Characteristics of Study Participants (n = 100)

Variable	Number (n)
Age (years)	
< 20	16
20–29	64
≥ 30	20
Parity	
Primigravida	64
Multigravida	36
Antenatal care	
Booked	30
Unbooked	70
Type of eclampsia	
Antepartum	68
Intrapartum	18
Postpartum	14

Table 2: Mode of Delivery among Eclamptic Women

Mode of delivery	Number (n)
Vaginal delivery	34
Caesarean section	66

Postpartum haemorrhage, pulmonary oedema, acute renal failure, and cerebrovascular accidents were among the maternal problems. Despite being lower,

maternal death was nevertheless noted in a small portion of instances. The maternal complications were presented in table 3.

Table 3: Maternal Complications Observed in Eclampsia

Maternal complication	Number (n)
Postpartum hemorrhage	20
Pulmonary edema	12
Acute renal failure	8
Cerebrovascular accident	6
Maternal death	5

Preterm deliveries, low birth weight babies, stillbirths, and admissions to the neonatal intensive care unit were all more common in perinatal

outcomes (table 4). Severe maternal problems and delayed presentation were associated with significantly higher perinatal fatality rates.

Table 4: Perinatal Outcomes

Perinatal outcome	Number (n)
Preterm birth	52
Low birth weight (<2.5 kg)	60
NICU admission	42
Stillbirth	14
Early neonatal death	8
Live birth	75

Discussion

The results of this study demonstrate that even when eclampsia is managed in a tertiary care setting, it is still linked to poor maternal and perinatal outcomes.

The high percentage of unbooked cases highlights the significance of routine prenatal care and early identification of pregnancy-related hypertension problems. The maternal problems found in this study

are similar to those seen in other studies of a similar nature from underdeveloped nations [3]. Prematurity, intrauterine growth restriction, and placental insufficiency were the main causes of poor perinatal outcomes [4]. Improving results is largely dependent on timely referral, suitable obstetric procedures, and the timely start of magnesium sulphate medication. The burden of complications connected to eclampsia may be considerably decreased by improving peripheral health services and raising awareness among expectant mothers [5,6].

Conclusion

One of the biggest causes of disease and mortality among mothers and new-borns is still eclampsia. To improve results, early diagnosis, sufficient prenatal care, prompt referral, and standardised management procedures are crucial. To stop eclampsia and its terrible effects, targeted community and primary healthcare initiatives are required.

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