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Impact of Eclampsia on Maternal Outcomes and Mortality: A Tertiary Care Experience

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Abstract

Background: *Eclampsia remains a major contributor to maternal morbidity and mortality in low-resource settings. Understanding its clinical profile and outcomes is essential for improving maternal care. This study aimed to evaluate the impact of eclampsia on maternal outcomes and mortality in a tertiary care hospital.*

Methods: *This hospital-based observational study was conducted in the Department of Obstetrics and Gynaecology at Dinajpur Medical College Hospital, Dinajpur, Bangladesh, from July 2008 to December 2008. In this study, we included 52 patients who were admitted with eclampsia at Dinajpur Medical College Hospital during the specified study period.*

Results: *The mean age of the patients was 22.0 ± 4.2 years, with nearly half (48.07%) aged 21–25 years. Most women resided in rural areas (65.39%) and belonged to the lower economic class (61.54%). Infrequent or absent antenatal care was common (80.77%). Antepartum eclampsia was the most frequent presentation (55.77%), followed by postpartum (25.0%) and intrapartum (19.23%). Magnesium sulfate was the primary anticonvulsant used (96.15%). Vaginal delivery occurred in 59.62% of cases, while 40.38% required caesarean section. The majority (94.23%) recovered, though 5.77% died. Grave complications were observed in 23.08% of patients, and overall morbidity was 44.23%. Common post-delivery complications included wound infection and hypertension (15.38% each). Among maternal deaths, cerebrovascular accident (66.67%) and pulmonary edema (33.33%) were the leading causes.*

Conclusion: *Eclampsia continues to pose significant risks to maternal health, particularly among young, rural, and socioeconomically disadvantaged women. Early detection, timely intervention, and improved antenatal care are critical to reducing associated morbidity and mortality.*

Keywords: *Eclampsia, Maternal Morbidity, Maternal Mortality, Tertiary Care, Antenatal Care.*

1. Introduction

Eclampsia remains one of the leading causes of maternal mortality in low-income countries (LICs), as well as a major cause of stillbirth and an important contributor to neonatal mortality [1–3]. It complicates approximately 3–6% of all pregnancies. Considerable variation in the reported prevalence of preeclampsia has been documented worldwide [4, 5],

Which may reflect true epidemiological differences or discrepancies in definitions and reporting practices. If left untreated, 2–10% of women with

preeclampsia may progress to eclampsia, with seizures most commonly occurring in cases of severe preeclampsia [6].

Eclampsia is one of the most serious acute complications of pregnancy, associated with high morbidity and mortality for both mothers and their infants [7]. It is defined as the occurrence of one or more generalized tonic–clonic seizures, unrelated to other medical conditions, in women with hypertensive disorders of pregnancy [8]. Although hypertensive disorders affect about 10% of pregnancies, eclampsia develops in 0.8% of these cases [8]. Over the past five decades, developed countries have reported a substantial decline in eclampsia incidence, ranging between 1.6 and 10 cases per 10,000 deliveries [9–11]. In contrast, the incidence remains much higher in low-resource settings, ranging from 50 to 151 per 10,000 deliveries [12–14].

In LICs, the risk of death from eclamptic seizures, especially with recurrent episodes, is extremely high, estimated at 25–50% [15–17]. Globally, eclampsia is responsible for approximately 15% of maternal deaths, 20–25% of fetal mortality, and contributes to nearly one-quarter of neonatal mortality, largely due to asphyxia and preterm birth. Alarmingly, about 98% of these maternal, fetal, and neonatal deaths occur in LICs, particularly in South Asia and sub-Saharan Africa [15–17].

Several strategies have been proposed to prevent the progression of preeclampsia to eclampsia and to reduce mortality from the condition. Accurate diagnosis through blood pressure and proteinuria assessment, followed by timely delivery, either by induction or cesarean section are key interventions [18–20]. Magnesium sulfate ($MgSO_4$) is widely recognized as the most effective anticonvulsant for preventing eclampsia and reducing maternal deaths [21–23].

Low-resource countries continue to report disproportionately higher rates of maternal and perinatal morbidity and mortality, largely due to differences in access to antenatal care, early detection, timely delivery, and healthcare infrastructure [24]. Eclampsia is associated with significant maternal complications, including placental abruption, disseminated intravascular coagulation, pulmonary edema, aspiration pneumonia, cardiopulmonary arrest, and acute renal failure. The risk of seizures in women with severe preeclampsia is around 2% without magnesium sulfate therapy, compared with less than 0.6% in those receiving prophylaxis [24]. Management of eclamptic seizures focuses on supportive measures to prevent maternal injury, administration of magnesium sulfate to prevent recurrence, and expedited delivery to improve outcomes [24].

In the present study, we aimed to evaluate the impact of eclampsia on maternal outcomes and mortality.

2. Methodology & Materials

This cross-sectional study was conducted in the Department of Obstetrics and Gynaecology at Dinajpur Medical College Hospital, Dinajpur, Bangladesh, from July 2008 to December 2008. In this study, we included 52 patients who were admitted with eclampsia at Dinajpur Medical College Hospital during the specified study period.

These were the following criteria for eligibility as study participants:

Inclusion Criteria

- Women aged 15–45 years.
- Women admitted with eclampsia at Dinajpur Medical College Hospital during the study period
- Women who gave written informed consent.

Exclusion Criteria

- Women with pre-existing epilepsy or seizure disorders not related to pregnancy.
- Patients referred after delivery with inadequate records of maternal outcomes.

Data Collection and Analysis

Informative written consent was taken after an explanation of the study procedure. Data were collected prospectively from eclampsia patients using a structured data sheet. Sociodemographic information was obtained by direct interview, while obstetric history and antenatal records were reviewed where available. Clinical findings, complications, and investigation results were documented through examination and hospital records. Maternal outcomes were recorded during hospitalization. All data were cross-verified with medical records for accuracy before compilation and analysis. The data were analyzed using SPSS 16 (Statistical Package for Social Sciences) for Windows version 10. Categorical variables, such as maternal morbidity,

mortality, and complications were expressed as frequencies and percentages. Continuous variables, such as maternal age were presented as mean ± standard deviation (SD). Data were tabulated and presented using tables and charts for clear visualization. This study was ethically approved by the Institutional Review Committee of Dinajpur Medical College Hospital.

3. RESULTS

In the present study, a total of 2,146 obstetrics cases were recorded in the Department of Obstetrics and Gynecology at Dinajpur Medical College Hospital during July 2008 to December 2008. Among these, 52 women were diagnosed with eclampsia, yielding an incidence rate of 2.42% (24.24 per 1,000 deliveries).

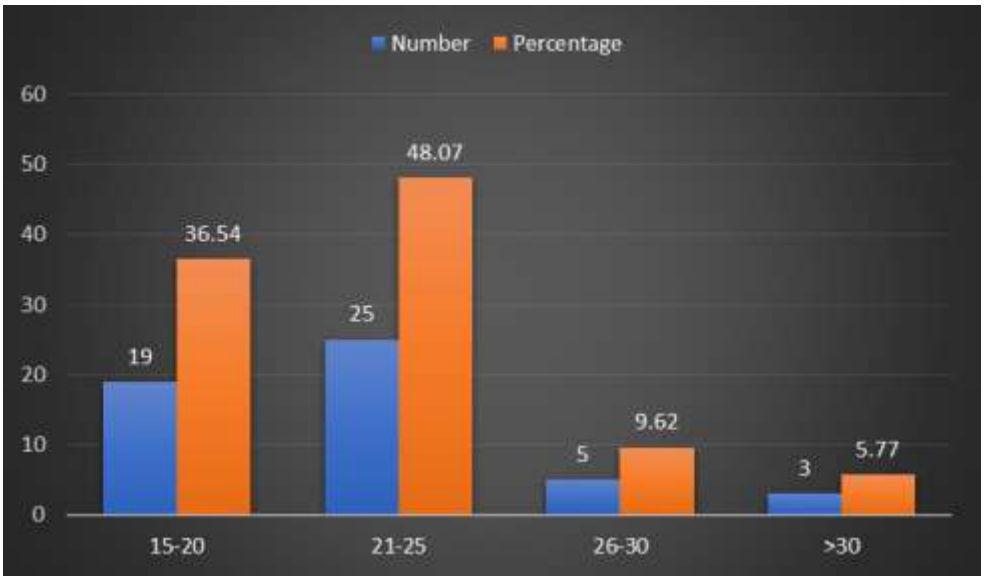

Figure 1. *Age distribution of Study Patients (n=52)*

Figure 1 illustrates the age distribution of patients. The largest proportion belonged to the 21–25 year age group, with 25 patients (48.07%). This was followed by the 15–20 year group, which included 19 patients (36.54%). In contrast, only 5 patients (9.62%) were aged between 26–30 years, and the smallest group was those above 30 years, with just 3 patients (5.77%).

Table 1. *Baseline Characteristics of Eclampsia Patients (n=52)*

Baseline Sociodemographic	**Number**	**Percentage (%)**
Mean age (years)	22.0 ± 4.2	
Education Level		
Illiterate	15	28.85
Primary	23	44.23
Secondary	12	23.08
Higher Secondary	2	3.84
Husband's Occupation		
Day labourer	18	34.62
Service	5	9.64
Business	9	17.31
Others (Farmer)	20	38.46
Residence		
Urban	18	9.61
Rural	34	65.39
Economic Status		
Lower class	32	61.54
Middle class	18	34.62
Upper middle class	2	3.84
Antenatal care		
No visit	11	21.15

Infrequent	31	59.62
Regular	10	19.23
Type of eclampsia		
Antepartum	29	55.77
Intrapartum	10	19.23
Postpartum	13	25.00

Table 1 presents the baseline sociodemographic and clinical characteristics of the study participants. The mean age of the patients was 22.0 ± 4.2 years. Nearly half had only primary education (44.23%), while 28.85% were illiterate, and very few (3.84%) had higher secondary education. Most husbands were engaged as farmers (38.46%) or day laborers (34.62%). The majority of women resided in rural areas (65.39%) and belonged to the lower economic class (61.54%). Regarding antenatal care, 59.62% had infrequent visits, 21.15% had no visits, and only 19.23% had regular follow-up. Clinically, antepartum eclampsia was the most common presentation (55.77%), followed by postpartum (25.0%) and intrapartum eclampsia (19.23%).

Table 2. *Clinical Characteristics and Management of Eclamptic Patients*

Clinical Characteristics	**Number**	**Percentage (%)**
Gestational age (weeks)		
<28	2	3.85
28-32	8	15.38
33-37	25	48.08
<37	17	32.69
Parity		
0	34	65.38
1-2	13	25
3-4	5	9.62
>4	0	0
Level of Consciousness		
Unconscious	47	90.38
Conscious	5	9.62
Range of diastolic BP		
<90	5	9.62
90-109	32	61.53
≥110	15	28.85
Urinary Albumin		
Nil	4	7.69
1+	25	48.08
2+	13	25.00
3+	10	19.23
Types of Anti-convulsant		
$MgSO_4$	50	96.15
Diazepam	2	3.85
Convulsions		
<4	18	34.62
5-10	30	57.69
>10	4	7.69
Interval between first convulsion and delivery (Hours)		
<12	38	73.08
>12	14	26.92
Mode of Delivery		
Vaginal	31	59.62
Caesarean section	21	40.38

Table 2 presents the clinical profile and management details of the patients studied. Nearly half of the patients (48.08%) were between 33–37 weeks of gestation, while about one-third (32.69%) were below 37 weeks. Most were primigravida (65.38%). At the time of presentation, a large majority (90.38%) were unconscious, and more than half (61.53%) had diastolic blood pressure between 90–109 mmHg. Albuminuria was common, with 48.08% showing 1+ protein in urine, and smaller proportions having 2+ (25%) or 3+ (19.23%). Magnesium sulfate ($MgSO_4$) was the main anti-convulsant used in 96.15% of cases. Most patients (57.69%) experienced 5–10 convulsions, while 34.62% had fewer than 4. In the majority of cases (73.08%), delivery occurred within 12 hours of the first convulsion. Vaginal delivery was the most frequent mode (59.62%), though caesarean section was also performed in 40.38% of cases.

Table 3. *Maternal Outcomes of Eclampsia Patients (n=52)*

Parameter	Number	Percentage (%)
Final Outcome		
Recovered	49	94.23
Expired	**3**	5.77
Grave Complications		
No	40	76.92
Yes	12	23.08
Overall Morbidity		
No Morbidity	29	55.77
Any Morbidity	23	44.23

Table 3 summarizes the maternal outcomes of the study participants. The majority of patients (94.23%) recovered, while 5.77% expired. Grave complications were reported in 23.08% of cases, whereas 76.92% had no such complications. Overall, 44.23% of women experienced some form of morbidity, while 55.77% had no morbidity.

Table 4. *Maternal morbidity and Complications of Eclampsia in Study Patients*

Maternal morbidity after delivery	Number	Percentage (%)
None	29	55.77
Wound infection	8	15.38
High temperature (infection)	5	9.62
Unconscious (CVA)	2	3.85
Raised blood pressure	8	15.38
Complication of eclampsia patients		
None	40	76.92
Pulmonary edema	2	3.85
HELLP syndrome	2	3.85
Disseminated coagulopathy (DIC)	1	1.92
Acute renal failure	1	1.92
Obstetric shock	3	5.77
CVA	2	3.85
Puerperal psychosis	1	1.92

Table 4 summarizes maternal morbidity following delivery, including both general complications and those specific to eclampsia patients. Overall, the majority of women (55.77%) experienced no morbidity. Among those with morbidities, wound infection and raised blood pressure were the most common, affecting 15.38% of patients each. In patients with eclampsia, most (76.92%) had no complications.

However, a subset developed serious conditions, including pulmonary edema and HELLP syndrome (3.85% each), obstetric shock (5.77%), and CVA (3.85%).

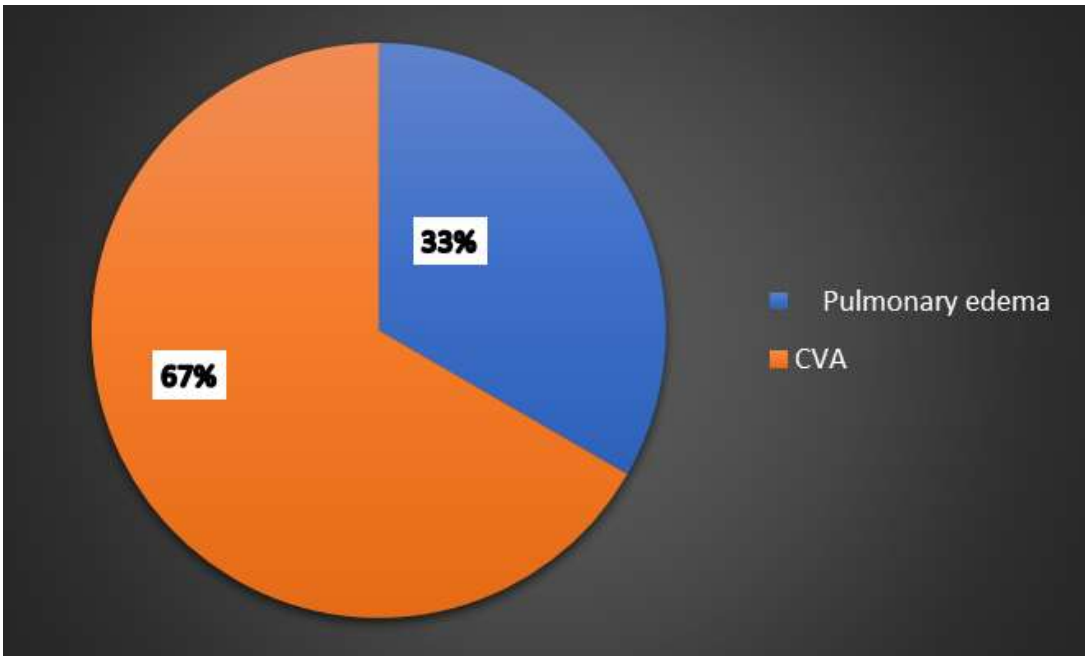

Figure 2. *Causes of Maternal Death in Eclamptic Patients (n=3)*

The pie chart illustrates the distribution of causes of death among the patients. Cerebrovascular accident (CVA) was the most frequent cause, responsible for 66.67% of deaths, representing two out of three cases. Pulmonary edema accounted for the remaining 33.33%, with one reported case.

4. Discussion

The incidence of eclampsia in developing countries has not declined as significantly as in developed nations, and the situation in India reflects this reality. Most studies from developing countries report an incidence between 1–2% [25–27]. Dora et al. reported a similar incidence of 1.48% [28], whereas in the present study the incidence was slightly higher at 2.42%.

In our study, nearly half of the women with eclampsia (48.1%) were between 21 and 25 years of age, and the majority were primigravida (65.4%). Previous studies have consistently identified primigravida women as being at increased risk of developing eclampsia [28,29]. Dora et al. found 69.64% of their patients were primigravida, with most (89.28%) aged less than 25 years [28]. Similar observations have been reported by other authors [25,30,31].

Eclampsia is characterized by seizures in a preeclamptic woman with elevated blood pressure and proteinuria. In our study, 61.53% of patients presented with a diastolic blood pressure between 90–109 mmHg, and almost half (48.08%) had 1+ proteinuria. Dora et al. found proteinuria in all patients with eclampsia, with 87.5% presenting with severe hypertension (≥160/110 mmHg) [28].

Consistent with existing literature, eclampsia was predominantly a disease of the third trimester. Previous studies reported that around 45% of women presented between 36–40 weeks of gestation [30,32]. In our study, nearly half of the cases (48.08%) presented between 33–37 weeks, which is comparable to Dora et al.'s finding of 51.78% between 36–40 weeks [28]. Antepartum eclampsia was the most common presentation (55.77%), likely reflecting delays in referral to tertiary care. This finding aligns with other studies [25,33].

Magnesium sulfate ($MgSO_4$) was the anticonvulsant of choice in this study, used in 96.15% of cases. It is well established as more effective than diazepam, phenytoin, or lytic cocktail [2]. Increased use of $MgSO_4$ has been shown to substantially reduce maternal mortality [22,34]. The Magpie Trial demonstrated a 60% reduction in seizures and a nonsignificant but important reduction in maternal mortality [35]. However, these benefits were mostly reported in high-income settings, with access to cesarean delivery, induction of labor, and antihypertensives [22].

In terms of delivery, vaginal birth was the most common mode (59.62%), though cesarean section was required in 40.38% of cases. Other studies have

reported higher cesarean rates among eclamptic patients [25,29,32]. Dora et al. found that 75% of women delivered vaginally, most of whom required induction of labor [28]. Severe maternal morbidity remains a major concern in eclampsia. In our study, 44.23% of patients experienced some morbidity, most commonly wound infection and persistent hypertension (15.38% each). Complications such as pulmonary edema, HELLP syndrome, obstetric shock, and cerebrovascular accident (CVA) were also observed (3.85–5.77%). By comparison, a Spanish study reported a 14% complication rate among eclampsia and HELLP patients admitted to intensive care, with renal failure seen in 5% [36]. Dora et al. identified placental abruption (14.28%) as the most frequent complication, followed by HELLP syndrome (10.21%), pulmonary edema, DIC, and renal failure (1.78% each) [28].

The maternal mortality rate in our study was 5.8%, mostly due to stroke and pulmonary edema. This figure is similar to other reports from developing countries, which describe rates around 5% [29,37]. However, mortality rates as high as 18.3% have been reported in Nigeria [29,37]. Haque et al. noted two maternal deaths (4.35%), attributed to aspiration pneumonia and CVA [38], while Duhan et al. reported a 6% mortality rate [39]. Dora et al. observed a somewhat lower rate of 3.57% [28]. In comparison, maternal mortality in developed countries is considerably lower. Clark et al., in their review of 1.46 million deliveries across 124 U.S. hospitals, reported 95 maternal deaths (6.5 per 100,000 pregnancies), with the leading causes being complications of preeclampsia, pulmonary thromboembolism, amniotic fluid embolism, obstetric hemorrhage, and cardiac disease [40].

5. Limitations of the Study

This study has several limitations. First, the study was conducted at a single tertiary care center. Second, this study took a small sample size, which may limit the generalizability of the findings to broader populations. Finally, long-term data on long-term maternal and neonatal outcomes after discharge were not assessed.

6. Conclusion and Recommendations

Eclampsia remains a significant cause of maternal morbidity and mortality, especially among young women from rural and socioeconomically disadvantaged backgrounds. This study underscores that limited antenatal care, low educational levels, and restricted access to healthcare are key risk factors. Although most patients recovered with timely administration of magnesium sulfate and appropriate delivery management, a notable proportion developed serious complications. Cerebrovascular accidents and pulmonary edema were the leading causes of maternal death, highlighting the importance of early recognition, prompt stabilization, and coordinated multidisciplinary care. Enhancing antenatal services, raising community awareness, and ensuring timely referral to tertiary care centers are essential steps to reduce the impact of eclampsia on maternal health.

Future multicenter studies with larger cohorts and follow-up data are recommended to provide a more comprehensive understanding of the impact of eclampsia on maternal health.

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Conflict of Interest: None declared

Ethical Approval: This study was ethically approved

References

[1] Dolea C, AbouZahr C. Global burden of hypertensive disorders of pregnancy in the year 2000. Geneva: World Health Organization; 2003.

[2] Duley L. The global impact of preeclampsia and eclampsia. Semin Perinatol. 2009;33(3):130–7.

[3] Blencowe H, Cousens S, Oestergaard MZ, Chou D, Moller AB, Narwal R, et al. National, regional, and worldwide estimates of preterm birth rates in 2010 with time trends since 1990: a systematic analysis and implications. Lancet. 2012;379(9832):2162–72.

[4] Bhutta ZA, Chopra M, Axelson H, Berman P, Boerma T, Bryce J, et al. Countdown to 2015 decade report (2000–10): taking stock of maternal, newborn, and child survival. Lancet. 2010;375(9730):2032–44.

[5] Ghulmiyyah L, Sibai B. Maternal mortality from preeclampsia/eclampsia. Semin Perinatol. 2012;36(1):56–9.

[6] Goldenberg RL, Jones B, Griffin JB, Rouse DJ, Kamath-Rayne BD, Trivedi N, et al. Reducing maternal mortality from preeclampsia and eclampsia in low-resource countries – what should work? Acta Obstet Gynecol Scand. 2015;94(2):148–55.

[7] Main EK, McCain CL, Morton CH, Holtby S, Lawton ES. Pregnancy-related mortality in California: causes, characteristics, and improvement

opportunities. Obstet Gynecol. 2015; 125(4): 938–47.

[8] Altman D, Carroli G, Duley L, Farrell B, Moodley J, Neilson J, et al. Do women with pre-eclampsia, and their babies, benefit from magnesium sulphate? The Magpie Trial: a randomized placebo-controlled trial. Lancet. 2002; 359(9321):1877–90.

[9] Shields LE, Wiesner S, Klein C, Pelletreau B, Hedriana HL. Early standardized treatment of critical blood pressure elevations is associated with a reduction in eclampsia and severe maternal morbidity. Am J Obstet Gynecol. 2017; 216(4):415.e1–5.

[10] Callaghan WM, Creanga AA, Kuklina EV. Severe maternal morbidity among delivery and postpartum hospitalizations in the United States. Obstet Gynecol. 2012; 120(5):1029–36.

[11] Jaatinen N, Ekholm E. Eclampsia in Finland, 2006–2010. Acta Obstet Gynecol Scand. 2016; 95(7):787–92.

[12] Eke AC, Ezebialu IU, Okafor C. Presentation and outcome of eclampsia at a tertiary center in South East Nigeria: a 6-year review. Hypertens Pregnancy. 2011; 30(2):125–32.

[13] Miguil M, Chekairi A. Eclampsia, study of 342 cases. Hypertens Pregnancy. 2008; 27(2):103–11.

[14] Vousden N, Lawley E, Seed PT, et al. Incidence of eclampsia and related complications across 10 low- and middle-resource geographical regions: secondary analysis of a cluster randomized controlled trial. PLoS Med. 2019; 16(3):e1002775.

[15] Adam GK, Bakheit KH, Adam I. Maternal and perinatal outcomes of eclampsia in Gadarif Hospital, Sudan. J Obstet Gynaecol. 2009; 29(7):619–20.

[16] O'Connor HD, Hehir MP, Kent EM, Foley ME, Fitzpatrick C, Geary MP, et al. Eclampsia: trends in incidence and outcomes over 30 years. Am J Perinatol. 2013; 30(8):661–4.

[17] Khan KS, Wojdyla D, Say L, Gulmezoglu AM, Van Look PFA. WHO analysis of causes of maternal death: a systematic review. Lancet. 2006; 367(9516):1066–74.

[18] Goldenberg RL, McClure EM, Macguire ER, Kamath BD, Jobe AH. Lessons for low-income regions following the reduction in hypertension-related maternal mortality in high-income countries. Int J Gynaecol Obstet. 2011; 113(2):91–5.

[19] Ferrazzani S, Luciano R, Garofalo S, D'Andrea V, De Carolis S, De Carolis MP, et al. Neonatal outcome in hypertensive disorders of pregnancy. Early Hum Dev. 2011; 87(6):445–9.

[20] Chu K, Cortier H, Maldonado F, Mashant T, Ford N, Trelles M. Cesarean section rates and indications in sub-Saharan Africa: a multi-country study from Médecins Sans Frontières. PLoS One. 2012; 7(9):e44484.

[21] Okereke E, Ahonsi B, Tukur J, Ishaku SM, Oginni AB. Benefits of using magnesium sulphate for eclampsia management and maternal mortality reduction: lessons from Kano State in Northern Nigeria. BMC Res Notes. 2012;5:421.

[22] Duley L, Gulmezoglu AM, Henderson-Smart DJ, Chou D. Magnesium sulphate and other anticonvulsants for women with preeclampsia. Cochrane Database Syst Rev. 2010; (11):CD000025.

[23] Dhakal G, Subedi M, Paudel K. Magnesium sulphate in management of severe preeclampsia and eclampsia. J Nepal Health Res Counc. 2012; 10(22):113–7.

[24] Bartal MF, Sibai BM. Eclampsia in the 21st century. Am J Obstet Gynecol. 2022;226(2 Suppl):S1237–53.

[25] Agida ET, Adeka BI, Jibril KA. Pregnancy outcome in eclamptics at the University of Abuja Teaching Hospital, Gwagwalada, Abuja: a 3-year review. Niger J Clin Pract. 2010; 13(4):394–8.

[26] Ndaboine EM, Kihunrwa A, Rumanyika R, Beatrice HLM, Massinde AN. Maternal and perinatal outcomes among eclamptic patients admitted to Bugando Medical Centre, Mwanza, Tanzania. Afr J Reprod Health. 2012; 16(1):35–41.

[27] Adekanle DA, Akinbile TO. Eclampsia and pregnancy outcome at Lautech Teaching Hospital Osogbo, South-West Nigeria. Clin Mother Child Health. 2012;9(1):1–4.

[28] Dora SK, Nayak L, Pande B, Dandapat AB. A prospective observational study for the evaluation of maternal and fetal outcome in patients with eclampsia. Int J Res Med Sci. 2017;5(5):1785–9.

[29] Akinola O, Fabamwo A, Gbadegesin A, Ottun A, Kusemiju O. Improving the clinical outcome in cases of eclampsia: the experience at Lagos State University Teaching Hospital, Ikeja. Internet J Third World Med. 2007; 6(2):1–5.

[30] Lavanya SG, Ganitha G. A prospective study of pregnancy outcome in eclampsia. Indian J Obstet Gynecol Res. 2017; 4(1):26–9.

[31] Jamil SN, Akhtar S. Maternal outcome in eclampsia. J Med Sci. 2005; 13(2):161–4.

[32] Sharara HA. A review of eclampsia in Qatar: a twenty-year study (1991–2009). Qatar Med J. 2012; 2012(2):7–15.

[33] Sibai BM. Diagnosis, prevention, and management of eclampsia. Obstet Gynecol. 2005; 105(2):402–10.

[34] McDonald SD, Lutsiv O, Dzaja N, Duley L. A systematic review of maternal and infant outcomes following magnesium sulfate for preeclampsia/eclampsia in real-world use. Int J Gynaecol Obstet. 2012; 118(2):90–6.

[35] Smyth RM, Spark P, Armstrong N, Duley L. Magpie Trial in the UK: methods and additional data for women and children at 2 years following pregnancy complicated by preeclampsia. BMC Pregnancy Childbirth. 2009; 9:15.

[36] Curiel-Balsera E, Prieto-Palomino MA, Munoz-Bono J, Ruiz de Elvira MJ, Galeas JL, Quesada-Garcia G. Analysis of morbidity and mortality among patients admitted to obstetrics ICU with severe preeclampsia, eclampsia and HELLP syndrome. Med Intensiva. 2011; 35(8):478–84.

[37] Moodley J. Maternal deaths associated with eclampsia in South Africa: lessons from the confidential enquiries into maternal deaths, 2005–2007. S Afr Med J. 2010; 100(11):717–9.

[38] Haque H, Thapa KK. Maternal and fetal outcome in eclampsia: a study from a tertiary care hospital. J Nepalgunj Med Coll. 2017; 15(2):6–9.

[39] Duhan L, Nanda S, Dahiya P, Chaudhary S. Sociodemographic profiling and study of maternal and perinatal outcome in patients suffering from eclampsia. Int J Reprod Contracept Obstet Gynecol. 2016; 5(6):1870–3.

[40] Clark SL, Belfort MA, Dildy GA, Herbst MA, Meyers JA, Hankins GD. Maternal death in the 21st century: causes, prevention, and relationship to cesarean delivery. Am J Obstet Gynecol. 2008; 199(1):36.e1–5.

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