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Eclampsia: A Continuous Scourge in a Tertiary Hospital in Southern Nigeria

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Abstract

Background: Eclampsia is responsible for over 50,000 maternal deaths with incidence of 1 death in about 100 - 1500 deliveries in developing nations. In sub-Saharan Africa, Nigeria accounts for the highest maternal mortality ratio of 512 deaths per 100,000 live deliveries and the highest neonatal fatality of 67 per 1000 live births. Factors such young age, nulliparity, multifetal gestation, unbooked cases, preterm delivery (<32 weeks), lack of proper access to antenatal care, poor hospital care, financial constraints and inappropriate diagnosis, have all been identified as risk factors promoting eclampsia. **Objectives:** In this study, we investigated the prevalence of eclampsia in Rivers State, Nigeria and established the correlation between social demographic factors and the feto-maternal outcomes among the eclampsia patients. **Methodology:** A prospective observational study using a detailed data sheet was conducted on 1244 pregnant women admitted at the Obstetrics and Gynecology Department of University of Port Harcourt Teaching Hospital, for 1-year duration. Data analysis was conducted using statistical packages for social sciences (SPSS) version 22. **Results:** Demography showed that age range (20 - 24) occurred in 40.7%, nulliparous mothers were dominant with 40.7% while 70.1% of the study population had secondary level of education. 27 cases of eclampsia were diagnosed from the 1244 pregnant women, which signified 2.13% prevalence among the studied population. The feto-maternal outcome showed that out of the 27 mothers, 19 were alive (70.4%) while 8 died (29.6%), while fetal outcome showed that 16 were alive (59.3%) and 11 died (40.7%). Only parity and education showed significant correlation at 0.01 and 0.05 levels respectively with maternal outcome. **Conclusion:** The prevalence of eclampsia with associated poor feto-maternal outcome rates is high in this study. Its contribution to the maternal and perinatal morbidities and mortalities necessitates the narrative of eclampsia being a scourge, as hypertensive disease remains an obstetric dilemma in both developed and developing countries.

Keywords

Eclampsia, Preeclampsia, Prevalence, Maternal, Fetal, Mortality, Booked, Unbooked

1. Introduction

Eclampsia is the occurrence of a single or several episodes of generalized, tonic-clonic convulsions, which are not related to other diseased conditions among women with hypertensive disorder during pregnancy [1]. Eclampsia results from untreated pre-eclampsia, which is the rapid increase in blood pressure during the pregnancy [2]. Although eclampsia could be prevented and treated, it is implicated in low and middle-income countries for maternal and fetal complications and associated deaths respectively [3].

The prevalence of eclampsia and its associated mortality differ from one region to another [4]. Globally, it is associated with over 50,000 maternal deaths with incidences of 1 death in about 100 - 1500 deliveries in developing nations, while accounting for 1 death in 2000 deliveries in developed nations [5]. Similarly, the rates of fatality are estimated to range from 0% - 1.8% in developed countries, but comparatively as high as 10% - 15% in developing countries [6] [7].

The risk factors that are associated with eclampsia are similar to those of preeclampsia or gestational hypertension [1]. Several studies globally [8] [9] [10] have identified these factors to include:

- Black and Hispanic race
- Young age,
- Nulliparity,
- Multifetal gestation,
- Multiparous pregnant women with a new partner,
- Unbooked cases,
- Preterm delivery at less than 32 weeks.

However, the disparity observed in the incidence of eclampsia among the developed and developing countries is not biological, rather they are as a result of behavioral pattern and health system inadequacies [8]. Furthermore, other factors such as lack of proper access to antenatal care, poor hospital care, financial constraints and inappropriate diagnosis and management of eclampsia patients, also contribute immensely to the regional differences in the incidence of eclampsia [4] [11].

According to the World Health Organization estimates on eclampsia, the incidence in developing nations is 2.8% for every live delivery, which is comparatively higher than 0.4% for the same conditions in developed nations [12]. Furthermore, Bilano *et al.* [13] had reported maternal mortality rate in Africa as 1.39% as compared to 0.05% and 0.68% recorded in South America and Asia re-

spectively. After a study on the prevalence and mortality of eclampsia across 24 countries from 3 continents, the high maternal mortality in Africa was attributed to the diagnostic capabilities and unavailability or inaccessibility of good hospital services [13].

According to the National Population Commission 2018 survey data in Nigeria [14], comparatively to other developing countries in sub-Saharan Africa, Nigeria has the highest maternal mortality ratio of 512 deaths per 100,000 live deliveries, highest neonatal fatality of 67 per 1000 live births and also the highest fertility rate of 5.3 children per woman. Consequently, eclampsia had become a leader in the maternal and neonatal fatalities and further implicated in the occurrence of complicated maternal and fetal outcomes [15] [16].

Similarly, two separate studies conducted in 2 different states in Southern Nigeria showed a prevalence of 0.44% and 1.66% for Enugu and Lagos in year 2011 and 2008 respectively [17] [18], while a study conducted in a state in Northern Nigeria in 2011 showed that eclampsia had a maternal fatality of 42% [19]. Furthermore, a 2020 study conducted by Awoyesuku *et al.* [10] in River State showed that eclampsia had a prevalence of 2.85% among 4496 deliveries reported over the 2 years' duration of the study.

In this study, we aim to investigate the prevalence of eclampsia in River State as one of the leading tertiary institution post covid era and to establish the correlation between social demographic factors and the feto-maternal outcomes among patients diagnosed with eclampsia.

We utilized a prospective based approach in recruiting patients for this study as they visited our facility.

2. Materials and Methodology

2.1. Study Location

The study was carried out at the University of Port Harcourt Teaching Hospital (UPTH) which is located at Port Harcourt, River State. UPTH being the foremost tertiary hospital in the southern state provided a good environment to receive patients diagnosed with eclampsia from the southern part of the country.

2.2. Study Design

We conducted a prospective observational study of pregnant women that were admitted at the booked and unbooked wards of the Obstetrics and Gynecology department of University of Port Harcourt Teaching Hospital. The study duration was for 1 year from April 2022 to April 2023.

2.3. Methods

A total of 1244 pregnant women were captured during the course of the study, with 1054 and 190 admitted to booked and unbooked labour ward respectively.

A detailed data sheet was used to assess the pregnant women during admission and then appropriate follow up was done till the women delivered at the hospital.

Data obtained included: age, parity, occupation, educational level, tribe, booking status on admission, clinical characteristics, drug history, gestational age at diagnosis of preeclampsia, Glasgow Coma Scale (GCS) at admission, fetal status at admission, delivery method, surgical interventions, puerperal complications, fetal outcome, maternal outcome, management units, and duration of hospital stay.

Statistical analyses for the obtained data were done using statistical packages for social sciences (SPSS) version 22.

3. Results

The total number of pregnant women admitted during the course of the study (1244) and the total number of deliveries witnessed within the same period (1269). Out of the total deliveries, 27 cases of eclampsia were diagnosed which signified 2.13% prevalence among the studied population. Furthermore, 0.16% and 1.97% prevalence were recorded for pregnant women admitted to the booked and unbooked labour ward respectively.

Table 1. Social demographics factors of the pregnant women (n = 27).

Demographic factor	Frequency (n)	Percentage (%)
Age range		
15 - 19	2	7.4
20 - 24	11	40.7
25 - 29	5	18.5
30 - 34	6	22.2
35 - 39	2	7.4
40 - 45	1	3.7
Parity		
0	11	40.7
1	7	25.9
2	5	18.5
3	2	7.4
4	2	7.4
Occupation		
Business	7	25.9
Civil servant	1	3.7
House wife	4	14.8
Seamstress	2	7.4
Student	7	25.9
Stylist	1	3.7

Continued

Teacher	1	3.7
Trader	2	7.4
Unknown	2	7.4
Educational level		
Primary	1	3.7
Secondary	20	74.1
Tertiary	3	11.1
Unknown	3	11.1

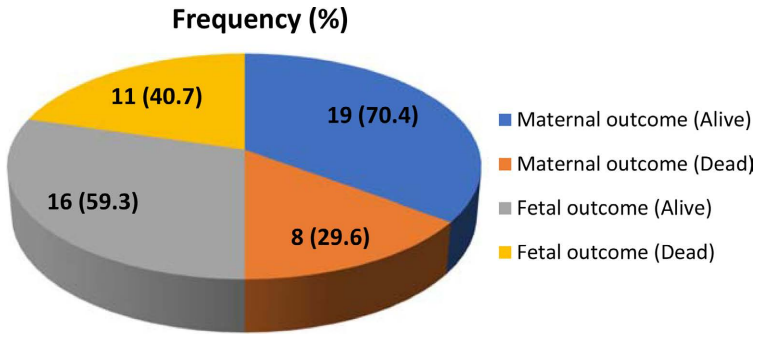

Figure 1. Pie chart showing maternal and fetal outcomes (n = 27).

The data presented in Table 1 shows the social demographic factors such as age, parity, occupation and educational background of the pregnant women, alongside their respective frequencies and the percentages. The age grade of 20 - 24 years had the highest frequency [11] accounting for 40.7%. Nulliparous mothers also accounted for a frequency of 40.7%. Meanwhile, of the occupations sampled, the highest frequency was shown to be women who were into business, which accounted for 25.9% and 20 women showing 74.1% only had secondary level of education.

Figure 1 shows the maternal outcome and fetal outcome. Out of the 27 mothers, 19 were alive (70.4%) while 8 died (29.6%). The fetal outcome showed that 16 were alive (59.3%) and 11 died (40.7%). Table 2(a) showed the cross tabulation between the maternal and fetal outcomes. Table 2(b) showed the degree of relationship between maternal outcome and fetal outcome. From the table, Pearson Chi-Square was 2.229a, df was 1 while and p value was 0.135. Since P value was higher than 0.05, the result was not significant, therefore there was no relationship between the fetal outcome and the maternal outcome.

The result obtained in Table 3 showed the correlation between social demographic factors and feto-maternal outcomes. From the table only parity showed significant correlation at 0.01 level while educational level showed significant correlation with maternal outcome at 0.05 levels.

The following tables show the level of significance between fetal outcomes and social demographic factors (Table 4).

Table 2. (a) Cross tabulation of maternal outcome and fetal outcome; (b) Chi-Square Test showing the degree of relationship between maternal outcome and fetal outcome.

(a)

Count		Fetal outcome		Total
		Alive (C1)	Dead (C2)	
maternal outcome	Alive (R1)	13	6	19
	Dead (R2)	3	5	8
Total		16	11	27

R1 is row 1, R2 is row 2, C1 is column 1, C2 is column 2.

(b)

	Value	df	Asymp. Sig. (2-sided)	Exact Sig. (2-sided)	Exact Sig. (1-sided)
Pearson Chi-Square	2.229[a]	1	0.135		
Continuity Correction[b]	1.133	1	0.287		
Likelihood Ratio	2.215	1	0.137		
Fisher's Exact Test				0.206	0.144
Linear-by-Linear Association	2.147	1	0.143		
N of Valid Cases	27				

*$p < 0.05$. a. 2 cells (50.0%) have expected count less than 5. The minimum expected count is 3.26. b. Computed only for a 2 × 2 table.

Table 3. Bivariate analysis result showing Correlation between social demographic factors and feto-maternal outcomes (n = 27).

		age	parity	occupation	maternal outcome	education	fetal outcome
Age	Pearson Correlation	1	0.521**	−0.187	0.188	0.188	0.161
	Sig. (2-tailed)		0.005	0.352	0.349	0.348	0.423
	N	27	27	27	27	27	27
Parity	Pearson Correlation	0.521**	1	−0.053	−0.078	0.076	0.083
	Sig. (2-tailed)	0.005		0.795	0.700	0.705	0.679
	N	27	27	27	27	27	27
occupation	Pearson Correlation	−0.187	−0.053	1	0.196	0.311	0.113
	Sig. (2-tailed)	0.352	0.795		0.327	0.114	0.576
	N	27	27	27	27	27	27
maternal outcome	Pearson Correlation	0.188	−0.078	0.196	1	0.414*	0.287
	Sig. (2-tailed)	0.349	0.700	0.327		0.032	0.146
	N	27	27	27	27	27	27
education	Pearson Correlation	0.188	0.076	0.311	0.414*	1	0.079

Continued

	Sig. (2-tailed)	0.348	0.705	0.114	0.032		0.697
	N	27	27	27	27	27	27
	Pearson Correlation	0.161	0.083	0.113	0.287	0.079	1
fetal outcome	Sig. (2-tailed)	0.423	0.679	0.576	0.146	0.697	
	N	27	27	27	27	27	27

**Correlation is significant at the 0.01 level (2-tailed). *Correlation is significant at the 0.05 level (2-tailed).

Table 4. (a) Logistic regression analysis showing the level of significance (p value) between fetal outcomes and social demographic factors. (n = 27). (i) Classification Table[a,b]. (ii) level of significance (p value) between fetal outcomes and social demographic factors. (b) Logistic regression analysis showing the level of significance (p-value) between maternal outcomes and social demographic factors. (n = 27). (i) Classification Table[a,b]; (ii) level of significance (p value) between maternal outcomes and social demographic factors.

(a)

(i)

Observed			Predicted		
			child outcome		Percentage Correct
			Alive	Dead	
Step 0	child outcome	Alive	16	0	100.0
		Dead	11	0	0.0
Overall Percentage					59.3

a. Constant is included in the model. b. The cut value is 0.500.

(ii)

		B	S.E.	Wald	df	Sig.	Exp (B)
Step 1[a]	age	0.041	0.083	0.247	1	0.619	1.042
	parity	0.105	0.395	0.070	1	0.791	1.110
	occupation	0.099	0.181	0.297	1	0.586	1.104
	Maternal outcome	1.351	1.042	1.680	1	0.195	3.861
	education	−0.332	0.697	0.227	1	0.634	0.718
	Constant	-3.021	2.353	1.648	1	0.199	0.049

a. Variable(s) entered on step 1: age, parity, occupation, maternal outcome, education.

(b)

(i)

Observed			Predicted		
			maternal outcome		Percentage Correct
			Alive	Dead	
Step 0	maternal outcome	Alive	19	0	100.0
		Dead	8	0	0.0
Overall Percentage					70.4

a. Constant is included in the model. b. The cut value is 0.500.

(ii)

		B	S.E.	Wald	df	Sig.	Exp(B)
Step 1[a]	age	0.124	0.110	1.258	1	0.262	1.132
	parity	−0.727	0.617	1.387	1	0.239	0.484
	occupation	0.165	0.231	0.511	1	0.475	1.179
	education	1.156	0.749	2.386	1	0.122	3.179
	Fetal outcome	1.421	1.072	1.756	1	0.185	4.140
	Constant	−8.888	4.111	4.675	1	0.031	0.000

a. Variable(s) entered on step 1: age, parity, occupation, fetal outcome, education.

Table 5. Comparing maternal outcomes with puerperal complications using chi-square test.

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	27.000[a]	20	0.135
Likelihood Ratio	32.815	20	0.035
Linear-by-Linear Association	5.246	1	0.022
N of Valid Cases	27		

a. 42 cells (100.0%) have expected count less than 5. The minimum expected count is .30.
*$p < 0.05$.

The p value obtained in Table 5 is not significant (p = 0.135) which implies that there was no relationship between the maternal outcome and the puerperal complications.

The following three tables (Tables 6-8) show that comparing maternal outcomes with multispecialty management, comparison of maternal outcome with clinical characteristics, and Comparison of maternal outcome and referral pattern.

4. Discussion

Recent analysis of large database for eclampsia from 29 countries estimates the global distribution of incidence in all deliveries to be 0.28% [20]. The incidence and mortality rates of eclampsia have been reported over the years in different regions. In India, Das and Biswas [21] in their 2015 study reported an incidence rate of 2.1% and an associated 4.9% mortality for eclampsia, Vousden *et al.* [22] in 2018 showed 0.5% incidence and 6.9% mortality in about ten low and middle-income countries studied while Anto *et al.* [23] documented 8.8% prevalence rate in their 2023 study in Ghana.

The combined prevalence in this study is 2.7% which is similar to the findings from a similar tertiary institution within the same state. However, there appears to be an uneven National distribution from hospital-based studies and statistics were reported as similar prevalence rates as seen by Ajah *et al.* [24] with higher rates in Kaduna and Enugu, while lower rates were reported in other southern

Table 6. Comparing maternal outcomes with multioperalty management. (a) Maternal outcome * Nephrologist; (b) maternal outcome * ophthalmologist; (c) maternal outcome * haematologist; (d) maternal outcome * cardiologist; (e) maternal outcome * physiotherapist; (f) maternal outcome * neurologist; (g) maternal outcome * social welfare.

(a)

Crosstab

Count

		Nephrologist		Total
		NO	YES	
maternal outcome	Alive	17	2	19
	Dead	6	2	8
Total		23	4	27

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)	Exact Sig. (2-sided)	Exact Sig. (1-sided)
Pearson Chi-Square	0.934[a]	1	0.334		
Continuity Correction[b]	0.139	1	0.709		
Likelihood Ratio	0.868	1	0.352		
Fisher's Exact Test				0.558	0.337
Linear-by-Linear Association	0.900	1	0.343		
N of Valid Cases	27				

a. 2 cells (50.0%) have expected count less than 5. The minimum expected count is 1.19.
b. Computed only for a 2 × 2 table.

(b)

Crosstab

Count

		opthalmologist		Total
		NO	YES	
maternal outcome	ALIVE	16	3	19
	DEAD	8	0	8
Total		24	3	27

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)	Exact Sig. (2-sided)	Exact Sig. (1-sided)
Pearson Chi-Square	1.421[a]	1	0.233		

Continued

Continuity Correction[b]	0.272	1	0.602		
Likelihood Ratio	2.263	1	0.133		
Fisher's Exact Test				0.532	0.331
Linear-by-Linear Association	1.368	1	0.242		
N of Valid Cases	27				

a. 2 cells (50.0%) have expected count less than 5. The minimum expected count is .89. b. Computed only for a 2 × 2 table.

(c)

Crosstab

Count

		haematologist		Total
		NO	YES	
maternal outcome	Alive	19	0	19
	Dead	7	1	8
Total		26	1	27

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)	Exact Sig. (2-sided)	Exact Sig. (1-sided)
Pearson Chi-Square	2.466[a]	1	0.116		
Continuity Correction[b]	0.207	1	0.649		
Likelihood Ratio	2.526	1	0.112		
Fisher's Exact Test				0.296	0.296
Linear-by-Linear Association	2.375	1	0.123		
N of Valid Cases	27				

a. 2 cells (50.0%) have expected count less than 5. The minimum expected count is .30. b. Computed only for a 2 × 2 table.

(d)

Crosstab

Count

		cardiologist		Total
		NO	YES	
maternal outcome	Alive	10	9	19
	Dead	8	0	8
Total		18	9	27

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)	Exact Sig. (2-sided)	Exact Sig. (1-sided)
Pearson Chi-Square	5.684[a]	1	0.017		
Continuity Correction[b]	3.752	1	0.053		
Likelihood Ratio	8.085	1	0.004		
Fisher's Exact Test				0.026	0.020
Linear-by-Linear Association	5.474	1	0.019		
N of Valid Cases	27				

a. 1 cells (25.0%) have expected count less than 5. The minimum expected count is 2.67.
b. Computed only for a 2 × 2 table.

(e)

Crosstab

Count

		physiotherapist	Total
		NO	
maternal outcome	Alive	19	19
	Dead	8	8
Total		27	27

Chi-Square Tests

	Value
Pearson Chi-Square	.[a]
N of Valid Cases	27

a. No statistics are computed because physiotherapist is a constant.

(f)

Crosstab

Count

		neurologist		Total
		NO	YES	
maternal outcome	ALIVE	16	3	19
	DEAD	5	3	8
Total		21	6	27

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)	Exact Sig. (2-sided)	Exact Sig. (1-sided)
Pearson Chi-Square	1.535[a]	1	0.215		

Continued

Continuity Correction[b]	0.536	1	0.464		
Likelihood Ratio	1.445	1	0.229		
Fisher's Exact Test				0.319	0.227
Linear-by-Linear Association	1.478	1	0.224		
N of Valid Cases	27				

a. 2 cells (50.0%) have expected count less than 5. The minimum expected count is 1.78.
b. Computed only for a 2 × 2 table.

(g)

Crosstab

Count

		Social welfare	Total
		NO	
maternal outcome	Alive	19	19
	Dead	8	8
Total		27	27

Chi-Square Tests

	Value
Pearson Chi-Square	.[a]
N of Valid Cases	27

a. No statistics are computed because welfare is a constant.

Table 7. Comparison of maternal outcome with clinical characteristics. (a) Maternal outcome * Hypertension; (b) maternal outcome * hypertensive drug.

(a)

Crosstab

Count

		Diagnosed hypertension			Total
		NO	UNKNOWN	YES	
maternal outcome	Alive	16	1	2	19
	Dead	5	2	1	8
Total		21	3	3	27

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	2.335[a]	2	0.311

Continued

Likelihood Ratio	2.125	2	0.346
Linear-by-Linear Association	0.684	1	0.408
N of Valid Cases	27		

a. 4 cells (66.7%) have expected count less than 5. The minimum expected count is 0.89.

(b)

Crosstab

Count

		Hypertensive drug			Total
		NO	UNKNOWN	YES	
maternal outcome	Alive	17	1	1	19
	Dead	6	2	0	8
Total		23	3	1	27

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	2.533[a]	2	0.282
Likelihood Ratio	2.594	2	0.273
Linear-by-Linear Association	0.204	1	0.651
N of Valid Cases	27		

a. 4 cells (66.7%) have expected count less than 5. The minimum expected count is 0.30.

Table 8. Comparison of maternal outcome and referral pattern.

Crosstab

Count

		referral pattern				Total
		GOVT HOSPITAL	PRIVATE HOSPITAL	SELF	TBA	
maternal outcome	Alive	2	5	8	4	19
	Dead	1	4	1	2	8
Total		3	9	9	6	27

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	2.487[a]	3	0.478
Likelihood Ratio	2.714	3	0.438
Linear-by-Linear Association	0.342	1	0.559
N of Valid Cases	27		

a. 6 cells (75.0%) have expected count less than 5. The minimum expected count is 0.89.

states of Benin and Lagos [17] [25] [26] [27] [28].

This study identifies the significance of inadequate poor prenatal and antenatal care as illustrated by 25 of the 27 identified patients being unbooked. The first booked patient received antenatal care at nearby Primary Health care centre with diagnosis of preeclampsia made at 36 weeks and the other at a private clinic with diagnosis of pre-elampsia made at 26 weeks. Both were referred to the study site of institution. The high prevalence rate among unbooked patients illustrates the interventions centered approach around adequate access to prenatal and antenatal care in developed countries. Other measures include early detection with careful monitoring and appropriate management as no single cost effective and reliable test for preeclampsia has been established for primary prevention. This had been emphasized since 2015 with the "Ending Eclampsia project", working to expand proven, underutilized interventions and commodities for pre-eclampsia/eclampsia (PE/E) prevention.

The unbooked mother remains a variable of importance. It is essentially the study of eclampsia as a scourge as other studies have demonstrated high prevalence of 75% of preeclampsia among booked patients. This further illustrates why globally; interventional models and protocols have been set up to address this scourge. Within the year of study, there were 190 women admitted into the unbooked labour ward and all maternal mortalities from eclampsia were from the unbooked mothers.

Nulliparity is strongly associated with both preeclampsia and eclampsia. 40.7% of our study population was nulliparous and unlike a similar study within the same state of study this showed significant correlation to the maternal outcome. Another significant correlation in this study was educational status with 74.1 % having secondary level of education.

In this study there were 8 maternal deaths with a case fatality of 29.6% from the 27 patients within the study period. The maternal deaths were post emergency caesearean sections in 5 of them, a forceps delivery in one patient while 2 patients presented as postpartum eclampsia following spontaneous vaginal delivery. All the patients in this study received Magnesium sulphate according to the Pritchard regimen and of significance amongst the 8 fatalities with 4 of the patients having repeated fits despite completing this Pritchard regimen.

The perinatal mortality of 44.4% is higher than comparable studies, with 8 of the patients with intra-uterine fetal death (IUFD) as at presentation/referral. This included a booked patient referred from a private clinic. The outcome of the second booked patient was an early neonatal death. This illustrates the scourge of this condition and the need for prompt diagnosis and management of preeclampsia and prevention of eclampsia.

As a tertiary institution, the availability of multi-disciplinary services is expected and necessary for the proper management of the multisystemic complications associated with eclampsia, as most referrals of these patients, irrespective of booking status remain the basis of presentation to this study centre. However,

this study showed that despite this holistic approach, the impact of these services did not improve feto-maternal outcomes as illustrated by the case fatalities with associated range of complications being managed. The constraints of availability and ability to implement these services though not within the objectives of this study is recognized as illustrated by the low socio-economic status, socio demographic of the patients involved and the standard of care of this tertiary centre. A proper assessment of this is recommended as MDT approach remains a necessity and core of good health services globally.

The emergency and early need of delivery of these patients has remained an important and often times point of controversy for the prognosis and eventual feto-maternal outcomes. With 13 of the 27 women having emergency caesarean sections as the mode of delivery, mostly to the diagnosis of unfavourable cervix associated with the management, this was statistical significant in this study. This finding is similar to most studies associated with eclampsia within Nigeria.

The limitations to this study despite it as a prospective study, engulfs the peculiarities of precise data collection from indigent and unbooked patients in a region where the low socio economic class and structure is the main bane of this scourge.

5. Conclusion

The prevalence of eclampsia with associated poor feto-maternal outcome rates is high in this study. Its contribution to the maternal and perinatal morbidities and mortalities necessitates the narrative of eclampsia being a scourge as hypertensive disease remains an obstetric dilemma in both developed and underdeveloped countries. It reinforces the pillars of maternal care of adequate and proper prenatal care and antenatal services rendered to women. Prompt diagnosis and prevention cannot be overemphasized. The controversy of wide spread availability magnesium sulphate, adequate comprehensive institutions, multispecialty approach though not overlooked still makes this multisystemic dilemma a scourge if early detection, and treatment, and the need to strengthen local, regional and global partnerships for care of hypertensive disorders in pregnancy of which eclampsia remain one of the severe forms.

Conflicts of Interest

The authors declare no conflicts of interest regarding the publication of this paper.

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