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Research Article

KNOWLEDGE AND PERCEPTION TOWARDS THE PREDISPOSING FACTORS TO ECLAMPSIA AMONG PREGNANT WOMEN ATTENDING THE ANTENATAL CLINIC AT THE UNIVERSITY OF ILORIN TEACHING HOSPITAL, ILORIN KWARA STATE

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Abstract

Eclampsia, one of the leading causes of maternal and perinatal morbidity and mortality globally, is one of the most dreaded causes of unfavourable pregnancy outcomes. Pre-eclampsia and eclampsia are thought to be the cause of nearly 63,000 maternal fatalities each year globally.

Objective: This study aimed to assess the level of knowledge and perception towards predisposing factors to eclampsia among pregnant women.

Materials and methods: This research assessed the level of awareness and perception of eclampsia risk factors among pregnant patients at the University of Ilorin Teaching Hospital and identified factors affecting those perceptions. 110 expectant women were chosen randomly from the research population for this descriptive cross-sectional survey, and the research participants responded to a self-structured questionnaire after informed consent was sought.

Results: Data collected were analysed using descriptive and inferential statistics with the level of significance set at 0.05. The majority of the respondents (41.8%) were 21-30 years old, and the majority (88.2%) were married. The study revealed that the majority of pregnant had good knowledge (89.1%) about predisposing factors to eclampsia, but their perception was poor. The findings showed no significant relationship between knowledge and perception towards the predisposing factors towards eclampsia among pregnant women with a p-value (0.319) > 0.05. Conclusion: Although pregnant women attending the antenatal clinic at the University of Ilorin Teaching Hospital have good knowledge towards predisposing factors to eclampsia, their perception is poor.

Keywords: knowledge, perception, predisposing factors, eclampsia, pregnant women

Introduction

According to [1], Eclampsia, one of the leading causes of maternal and perinatal morbidity and mortality globally, is one of the most dreaded causes of unfavourable pregnancy outcomes. Pre-eclampsia and eclampsia are thought to be the cause of nearly 63,000 maternal fatalities each year globally [2]. Eclampsia increases the likelihood of stillbirths, the need for cesarean sections during deliveries, the number of admissions to critical care units, the

prevalence of respiratory distress syndrome in newborns, and low birth weights. Foetal death is also caused by intrauterine development restriction, placenta infarcts, abruptio placentae, fetal hypoxia, and other factors [3]. Significant causes of maternal, fetal, and neonatal morbidity and death include hypertensive diseases. Eclampsia is one of the most common reasons for pregnancy-related death and is a type of hypertensive disorder of pregnancy. Many expectant mothers are unaware of eclampsia and the risk factors that increase their risk [4]. Thus, a significant barrier to understanding the aetiology and treatment of the conditions is the absence of adequate public health awareness anchored in cultural values. The incidence of pre-eclampsia and eclampsia in Nigeria ranges from 2% to 16.7%, and the country has one of the highest maternal mortality rates (496 to 560 per 100,000 live births) [5]. According to [5] some communities in Northern Nigeria, eclampsia is thought to be brought on by Iska and a lack of understanding of the causes (spirits). Similarly, Nigerian males have claimed that social and economic reasons, subpar healthcare, or paranormal spirits are to be blamed for maternal deaths. While some women in Nigeria recognised eclampsia and hypertension as possible causes of maternal mortality, some Nigerians did not recognise the symptoms of pre-eclampsia. During the researcher's tour to the obstetrics and gynaecology ward of the University of Ilorin Teaching Hospital, Kwara State, it was discovered that pre-eclampsia/eclampsia took the lead in the disease conditions that affect pregnant women. These figures (237) were 26.8% and 192 in 2016 and 2017, respectively, obtained from the O&G ward, UITH, Ilorin, Kwara State [6]. Therefore, this prompted the researcher to carry out this study to assess the knowledge and perception of pregnant women about the predisposing factors to eclampsia.

Objective

To assess knowledge and perception of predisposing factors to eclampsia among pregnant women attending the antenatal clinic at the University of Ilorin Teaching Hospital, Kwara State, Nigeria.

MATERIALS AND METHODS

A quantitative non-experimental descriptive design was used to assess knowledge and perception of the predisposing factors to eclampsia among pregnant women attending the University of Ilorin Teaching Hospital. The sample size was calculated using Fisher's formula to get 110 pregnant women, and a simple random probability sampling technique was used in selecting 110 pregnant women for the study in the research setting. A self-structured questionnaire was used as the data collection tool to assess pregnant women who were patients at the University of Ilorin Teaching Hospital in Ilorin, Kwara State, regarding their awareness and perception of the risk factors for eclampsia. The test-retest method was employed to ensure the instrument is consistent in measuring what it is supposed to assess. Two assistants who had been specially taught in this task helped distribute the questionnaire during the clinic hours of 8 am to 4 pm each day for two weeks. The Chi-square test of association was used as the inferential statistic to test the hypothesis at the 5% significance level (indicating a significant relationship or association if the p-value (p) is less than or equal to.05; otherwise, there is no significance).

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RESULTS

110 questionnaires were administered to respondents and same analysed using Statistical Product Service Solutions (SPSS) version 21. Details of the results obtained are presented in tables and charts which are shown below, and testing of hypotheses generated.

Table 3.1 showing demographic data of respondents (n=110)

Variables	Responses	Frequency	Percentage
	below 15-20yrs	3	2.7
Age	21-30yrs	46	41.8
	31-34yrs	32	29.1
	35yrs and above	29	26.4
	Single		
Marital status	married	13	11.8
	Divorced	97	88.2
	Separated	0	0
	None	0	0
Educational	primary school		
Qualification	secondary school	5	4.5
	Tertiary institution	6	5.5
	Christianity	17	15.5
Religion	Islam	82	74.5
	Traditional	Others	
	Yoruba	48	44
Ethnicity	Igbo	58 3	53.2
	Hausa	Others 1	2.7
	Civil servant		0.9
Occupation	Self employed	82	
	Housewife	7	74.5
	Student	1	6.4
		20	0.9
			18.3
		40	
		45	36.4
		13	40.9
		12	11.9

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10.9

Table 3.1 above showed that the majority of the respondents (41.8%) fell within the range of 21-30 years. 88.2% were married, the more than half of the respondents went to tertiary institutions. Just above half of the respondents (52.7%) were Muslims, 75.2% were Yoruba, and 43.3% were self-employed.

Table 4.2 showing the level of knowledge towards eclampsia (n = 110)

S/N	Variables	Responses	Frequency	Percentage
1.	Have you heard about eclampsia	Yes	76	73.1
		No	34	29.6
2.	If yes, what is eclampsia in your ow word?	Excellent	40	36.4
		Fair	25	22.7
		Poor	45	40.9
3.	Eclampsia is a disease that affects pregnan women and their baby characterised by convulsions	Yes	83	75.5
		No	27	24.5
4	It is also characterised by oedema and hig blood pressure	Yes	79	71.8
		No	31	28.1

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5	Headache	Yes	78	70.9
		No	32	29.1
6	Blurred vision	Yes	68	61.8
		No	42	38.2
7	What is your source of information Health worker	Yes	56	50.9
		No	54	49.1
8	Social media, e.g., radio, TV, Facebook and WhatsApp	Yes	47	42.7
		No	63	47.3
9	Friend	Yes	22	20
		No	88	80
10	Have you ever read any book or journal o eclampsia?	Yes	16	14.5
		No	94	85.5
11	Have you ever attended seminar/workshop on eclampsia?	Yes	19	17.3
		No	91	82.7

Table 3.2 above showed that the majority, 76 (73.1%), had heard about eclampsia, but most of the respondents (40.9%) could not talk about it in their own words. 76 (75.5%) of the respondents noted that eclampsia is a disease that affects pregnant women and their babies. The majority, 79 (71.8%), noted that eclampsia is characterised by oedema and high blood pressure, and the majority, 78 (70.9%), noted that it is characterised by headache. 68 (61.8%) noted that it is also characterised by blurred vision, and 56 (50.9%) heard about eclampsia from health workers. While 63 (47.3%) did not hear about it from social media, e.g., WhatsApp, radio, TV, and Facebook. (85.5%) have not read a book or journal on eclampsia, and 91 (82.7%) have not attended a seminar or workshop on eclampsia.

Table 3.3 Showing the level of knowledge towards predisposing factors to eclampsia (n =110)

S/N	Variables	Responses	Frequency	Percentage
1	Obesity	Yes	49	44.5
		No	61	55.5
2	Previous history of hypertension	Yes	71	64.5
		No	39	35.4
3	Family history of pre-eclampsia and eclampsia	Yes	67	60.9
		No	43	39.1
4	High intake of salt	Yes	56	50.9
		No	54	49.1

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5	Extreme heat or cold	Yes	34	30.9
		No	78	69.1
6	Twin pregnancy	Yes	32	29.1
		No	78	70
7	First pregnancy	Yes	21	19.1
		No	89	80.9
8	Kidney disease	Yes	47	42.7
		No	63	57.2
9	Teenage pregnancy or pregnant woman of	Yes	45	40.9
	35yrs old or more	No	65	59.1
10	Diabetes mellitus	Yes	47	42.7
		No	63	57.2
11	Low socio-economic class	Yes	23	20.9
		No	87	79.1

Table 3.3 showed majority 61 (55.5%) did not associate obesity as a predisposing factor to eclampsia, 71 (64.5%) noted that previous history of hypertension is a predisposing factor to eclampsia. 67 (60.9%) noted that a family history of pre-eclampsia and eclampsia predisposes to eclampsia. 56 (50.9%) noted that a high salt intake is also a predisposing factor to eclampsia.

Table 3.4 showing the level of knowledge towards prevention of eclampsia, (n =110)

S/N	Variables	Responses	Frequency	Percentage
1	Do you know other things that cause(s	Yes	8	7.3
	eclampsia?	No	102	92.7
2	If no, why? Procrastination	Yes	29	26.4
		No	81	73.6
3	Lack of confidence in oneself	Yes	18	16.3
		No	92	83.7
4	There is no time	Yes	31	28.2
		No	79	71.8
5	What are the barriers to the acquisition o	Yes	54	49
	knowledge on eclampsia?	No	56	51
	Lack of access to health facility			
6	Level of education	Yes	41	37.2
		No	69	62.8

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7	Lack of support from husband	Yes	37	33.6
		No	73	66.4
8	Lack of funds	Yes	35	31.8
		No	75	68.2

Table 3.4 above showed that 102 (92.7%) did not know other causes of eclampsia, while 81 (73.6%) did not identify procrastination as one of the reasons why people can't prevent eclampsia. The majority, 92 (83.7%), did not identify a lack of confidence in oneself as one of the reasons why people cannot prevent eclampsia, and 79 (71.8%) did not attribute it to no time. 56 (51%) did not attribute it to lack of access to health facilities as a barrier to acquiring knowledge on eclampsia.

Table 3.5 showing respondents' perception towards eclampsia and its predisposing factors (n=110)

	Strongly Agree		**Agree**		**Strongly Disagree**		**Disagree**		**Undecided**	
	Freq	**(%)**	**Freq**	**(%)**	**Freq**	**(%)**	**Freq**	**(%)**	**Freq**	**(%)**
Eclampsia is epilepsy in pregnancy	6	5.5	38	34.5	8	7.3	22	20	36	32.7
Eclampsia is caused by lizard	2	1.8	5	4.5	27	24.5	46	41.8	30	27.2
Eclampsia is caused by evil spirit(s)	0	0	5	4.5	39	35.5	31	28.2	35	31.8
Eclampsia is caused by extremely stressful event or situation	10	9.1	53	48.2	0	0	12	10.9	35	31.9
Eclampsia is caused by destiny	2	1.8	8	7.3	37	33.6	33	30	30	27.3
Eclampsia is caused by poor nutrition	8	7.3	41	37.3	10	9.1	18	16.4	33	30
Eclampsia is preventable with good antenatal care	50	45.5	32	29.1	2	1.8	2	1.8	24	21.8
Eclampsia is preventable by hospital delivery	28	25.5	46	41.8	4	3.6	2	1.8	30	27.3

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Eclampsia is preventable by avoiding early marriage	6	5.5	12	10.9	20	18.2	25	22.7	47	42.7
Eclampsia is preventable by avoiding delivery a age ≥35 years	11	10	37	33.6	14	12.7	12	10.9	36	32.7
The health of my unborn child is at risk if I don't preven eclampsia	41	37.3	37	33.6	2	1.8	2	1.8	28	25.4
The best source o treatment fo eclampsia is hospital	53	48.2	27	24.5	2	1.8	2	1.8	26	23.7
The best source o treatment fo eclampsia is by spiritual/divine intervention	3	2.7	8	7.3	42	38.2	27	24.5	30	27.3
I support the idea o knowing about my health condition thereby preventing eclampsia	51	46.4	31	28.2	2	1.8	2	1.8	24	21.8

Table 3.5 above showed 6 (5.5%) strongly agreed that eclampsia is epilepsy in pregnancy, 38 (34.5%) agreed. 27 (24.5%) strongly disagreed, majority, 46 (41.8%) disagreed epilepsy is caused by lizard. The majority, 39 (35.5%), strongly disagreed, and 31 (28.2%) disagreed eclampsia is caused by evil spirit(s). 10 (9.1%) strongly agreed that eclampsia is caused by extremely stressful events, and 53 (48.2%) agreed.

Hypothesis Testing

Ho_1: there is no significant relationship between the knowledge and perception towards the predisposing factors towards eclampsia among pregnant women.

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Table 3.7 Chi-square test showing the relationship between knowledge and perception of pregnant women about predisposing factors to eclampsia. (n =110)

Knowledge towardits eclampsia and predisposing factors	Perception towards eclampsia and it predisposing factors			Pearson chisquare X^2	p-value	Df
	Poor	Excellent	Total			
Poor	9	3	12	0.992	1	0.319
Excellent	59	39	98			
Total	68	42	110			

Table 4.7 above shows that there is no a significant relationship between the knowledge and perception towards the predisposing factors towards eclampsia among pregnant women with p-value (0.319) > 0.05. Therefore, null hypothesis is hereby accepted and the alternate hypothesis is accepted.

X^2 (1, N=110) = 0.992, P = 0.319

DISCUSSION

Socio-demographic characteristics

The demographic characteristics study revealed that the majority (41.8%) were within the age range of 21-30yrs, 88.2% married; this indicates that majority of them were married. (74.5%) of the respondents who went to tertiary institutions, the majority, 75.2%, were Yoruba, which is not surprising as the study was carried out in a Yoruba-dominated state.

Knowledge towards predisposing factors to eclampsia

The study revealed that the majority, 76 (73.1%), had heard about eclampsia, while the rest, 34 (29.6%), had not. Also, 40 (36.4%) excellently talked about eclampsia in their own word, 25 (25%) said it fairly, while 40.9% were not able to talk about eclampsia in their own word. This indicates their level of knowledge about eclampsia is satisfactory. In addition, 49 (44.5%) noted that obesity is a predisposing factor to eclampsia, while the majority, 61 (55.5%), did not. This is contrary to a study carried out by [1] in Ebonyi State, Nigeria which revealed that obesity is one of the most prevalent predisposing factors to eclampsia. The majority, 71 (64.5%), noted that previous history of hypertension is a predisposing factor to eclampsia, while 39 (35.5%) did not. This is similar to a study carried out by [7], which revealed that previous history of hypertension and pre-eclampsia is the most prevalent cause(s) of eclampsia. Furthermore, 32 (29.1%) noted that twin pregnancy was a predisposing factor to eclampsia, while 78 (70%) did not. This is contrary to a study carried out by [8], who noted many (around 70 % of cases) of the pregnancies affected by eclampsia or preeclampsia are first pregnancies. In addition, 47 (42.7%)

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noted that kidney disease is a predisposing factor to eclampsia, while 63 (57.2%) did not. This is contrary to a study carried out by [7], who stated that kidney disease is the second most prevalent predisposing factor to eclampsia. 65 (59.1%) did not identify teenage pregnancy or pregnant women of 35yrs old or more as a predisposing factor to eclampsia, 47 (42.7%) noted that diabetes mellitus is a predisposing factor to eclampsia, while 63 (57.2%) did not. This is contrary to a Cochrane study done by [9] which stated that pregnant women with diabetes or gestational diabetes are at higher risk of developing eclampsia. Findings showed that 102 (92.7%) did know other causes of eclampsia, and 81 (73.6%) did not identify procrastination as one of the reasons why people can't prevent eclampsia. The majority, 92 (83.7%), did not identify a lack of confidence in themselves as one of the reasons, 79 (71.8%) did not identify a lack of time. Also, 56 (51%) did not note a lack of access to health facilities as a barrier to acquiring knowledge on eclampsia. This is congruent to a study done by [7], who stated that the variation of pre-eclampsia/eclampsia prevalence is perhaps not only reflective of the variability in maternal risk-factor distribution but may also be attributed to differences in facility and country characteristics, such as diagnostic capacities or accessibility of services. In conclusion, 75 (68.2%) did not note lack of funds as a barrier to acquiring knowledge on eclampsia. Reyes and Conde-Agudelo, as quoted by [7], stated that the associations between these risk factors and preeclampsia/eclampsia may be explained by various proposed pathophysiologic pathways. For the interrelated conditions of high BMI, hypertension and diabetes, the accompanying insulin resistance and hypertriglyceridemia have been suggested to contribute to the endothelial dysfunction linked to pre-eclampsia incidence.

Perception of pregnant women towards predisposing factors to eclampsia.

Findings revealed that 6 (5.5%) and 38 (34.5%) agreed strongly agreed that eclampsia is epilepsy in pregnancy. 27 (24.5%) strongly disagreed, and 46 (41.8%) disagreed epilepsy is caused by lizards. The majority, 39 (35.5%), strongly disagreed, and 31 (28.2%) disagreed eclampsia is caused by evil spirit(s). The majority, 50 (45.5%), strongly agreed, and 32 (29.1%) agreed that eclampsia is preventable with good antenatal care. This is contrary to a Cochrane study by [9], which stated that antenatal screening for pre-eclampsia is an essential part of good ANC. It is routinely performed by measuring maternal blood pressure and checking proteinuria at each ANC contact and upon detection of pre-eclampsia, specific management is to prevent eclampsia and other poor maternal and perinatal outcomes. From the above, it will be noted that from the listed perceptions towards eclampsia and its predisposing factors, eclampsia is preventable with good antenatal care was topmost on the list (74.6%), while Eclampsia is caused by an evil spirit(s) was the lowest

There was a similar consensus regarding the perceived cause of eclampsia which is an extremely stressful event or situation, the most prevalent perception identified by [1] is psychological distress (stressful event/situation).

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CONCLUSION

Based on the findings from this study, the researcher concludes that although pregnant women attending the antenatal clinics at the University of Ilorin Teaching Hospital have good knowledge towards predisposing factors to eclampsia, their perception is poor. Therefore, below are the recommendations:

▪ Nurses should intensify efforts in health educating pregnant women about hypertensive disorders in pregnancy and other disorders in pregnancy.

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