Volume: 3, Issue: 5
Page: 51-63
YEAR: 2021

ISSN 2664-7354 (Online) & ISSN 2708-2687 (Print)

International Journal of Academic Research in Business, Arts and Science (IJARBAS.COM)

Factors Influencing Cardiovascular Risk of Preeclampsia in Mothers at Ekiti State University Teaching Hospital, Ado Ekiti, Nigeria

AUTHOR(S): AROWOSOLA, Foluke Ebunoye (RN, RM, BNSc.),
AND
Prof. SOTUNSA, John Obafemi

Abstract

The leading cause of death of women worldwide and number one cause of maternal morbidity and mortality in developing countries including Nigeria is Cardiovascular disease (CVD). Preeclampsia gives women added vulnerability to CVD, and women who have had preeclampsia have 3 to 4 times risk of hypertension and double the risk for heart disease and stroke. This study examined factors influencing cardiovascular risk of preeclampsia in mothers at Ekiti State University Teaching Hospital, Ado Ekiti, Nigeria. The study adopted survey research design. The population comprised 146 mothers from Ekiti State University Teaching Hospital, Ado Ekiti. Purposive sampling technique was used for the study. A structured questionnaire which was validated was used to collect data. Cronbach's alpha reliability coefficient values are 0.787 and 0.958. The study achieved a response rate of 98.3%. Data collected were analyzed using descriptive and inferential statistics, mean and standard deviation for research questions while Chi-square test were used to test hypotheses. The study found that most of the respondents had moderate level of knowledge on cardiovascular risk of preeclampsia as 42 respondents representing (35.9%) had moderate level of knowledge. The study also found that most of the respondents had low level of knowledge on factors influencing cardiovascular risk of preeclampsia as 74 respondents representing (63.2%) had low level of knowledge. The study concluded that most women have moderate knowledge on cardiovascular risk of preeclampsia and

IJARBAS
Accepted 18 May 2021
Published 21 May 2021
DOI: 10.5281/zenodo.4780115

low level of knowledge on factors influencing cardiovascular risk of preeclampsia. The study therefore, recommended among others that there should be increased awareness and education of the general population on the prevention and control of risk factors and training of health professionals on appropriate diagnosis and management of cardiovascular disease (CVD).

Keywords: Factors Influencing, Cardiovascular, Risk, Preeclampsia, Mothers,

About Author

Author(s): **AROWOSOLA, Foluke Ebunoye (RN, RM, BNSc.)**
Department of Maternal and Child Health Nursing,
School of Nursing Science,
Babcock University, Ilishan-Remo, Ogun State, Nigeria.

And

Prof. SOTUNSA, John Obafemi
Director of Clinical Services and Training/Professor/Consultant,
Babcock University Teaching Hospital,
Babcock University, Ogun State, Nigeria.

Introduction

Pregnancy-induced hypertension (PIH) which is known as preeclampsia is a hypertensive disorder specific to pregnant women that most times occurs after 20 weeks of pregnancy and negatively affects both fetus and the mother. It is a progressive condition evidenced by elevated blood pressure, with or without body edema and significant protein in urine (Proteinuria). The condition was discovered nearly 2000 years ago (Bilano, et al, 2015). Preeclampsia is one of the major causes of perinatal and maternal illness and death globally, (Hutcheon, et al., 2017; Otieno, 2017). The prevalence of preeclampsia is seven times more in developing countries (2.8% of live births) than in developed countries (0.4%). In the developing world, there are more common severe forms of preeclampsia, ranging from a low range of 4% of all childbirth to as high as 18% in parts of Africa, (WHO, 2016). The difference in prevalence rates is caused by the descriptions discrepancy and other criteria (including procedures, tests and their methodologies), woman is seven times likely to have preeclampsia than a woman in a developed country. From 10-25% of these incidences will result in maternal death (WHO, 2016).

In Nigeria, an increased trend in the incidence of cardiovascular disease (CVD) in urban Nigeria was observed among south-western female patients, there was a noticeable increase in the incidence of CVD to 150 (Ajah, et al., 2016). In Ekiti State, CVD account for about 50% of older women's mortality (60years and above), (David, et al, 2019) Preeclampsia makes women more vulnerable to CVD, women who have had preeclampsia have double the risk for stroke and heart disease and 3-4 times risk of having hypertension. One possible reason for this relationship is that (Preeclampsia and CVD have various common risk factors such as (renal disease, obesity, and diabetes mellitus,) or, alternatively, preeclampsia may cause long term vascular and metabolic abnormalities that may advance overall risk for CVD later in life, (Itoh, et al 2017; Wallis, et al, 2018).,

Logan (2020) submitted that preeclampsia is one of the fatal conditions that affect pregnant women, which occurs in about 7% of the populace. Among the predisposing factors are: poor ANC visit, obesity/overweight, previous history of preeclampsia primi gravidity, pre-existing hypertension, short pregnancy interval, nulliparity, hypercholesterolemia, and belonging to black race. The complication is eclampsia, which fatal to the mother as well as the fetus. The major cause of mortality of women globally is Cardiovascular disease (CVD), preeclampsia is a significant and identified women' specific risk factor, women with history of preeclampsia have an increased risk to develop CVD in the future following their first/index pregnancy. The incidence of cardiovascular complications such as chronic hypertension, myocardial infarction, heart failure (Laura, et al., 2019), it is as high as 6% in Nigeria the incidence of stroke and renal disease in women affected by preeclampsia (WHO, 2016).

Knowledge gap was identified as factors influencing cardiovascular risk of preeclampsia in mothers at Ekiti State. The researcher discovered that women with history of preeclampsia do not come early to cardiology clinic until the symptoms of cardiovascular complications such as headache, chest pain, palpitation, blurring of vision, numbness, and inability to sleep are been experienced. A history of preeclampsia may help know women with CVD risk early in life, thus offering chance for timely screening, preventive and treatment strategies, it was also observed that they lack the understanding of the cardiovascular risk factors (Ying, Catov & Ouyang, 2019). Women with history of preeclampsia at Ekiti State University Teaching Hospital, Ado Ekiti seem to lack knowledge on cardiovascular risk factors. The situation of the cardiovascular disease in the country

demands the understanding of natural history of the disease, the relationship between cardiovascular disease and preeclampsia and the risk factors.

In view of the above, the main objective of the study was to assess the factors influencing cardiovascular risk of preeclampsia in mothers at Ekiti State University Teaching Hospital, Ado Ekiti, Nigeria. This study specifically:

1. assessed the level of knowledge of mothers on cardiovascular risk of preeclampsia;
2. determined the level of knowledge of mothers on the factors influencing cardiovascular risk of preeclampsia;
3. determined the association between socio-demographic characteristics and level of knowledge of mothers on cardiovascular risk of preeclampsia in mothers; and
4. determined the association between socio-demographic characteristics and knowledge of mothers on factors influencing cardiovascular risk of preeclampsia at Ekiti State University Teaching Hospital, Ado Ekiti.

Research Questions

The following research questions were raised for this study:

1. What is the level of knowledge of mothers on cardiovascular risk of preeclampsia at Ekiti State University Teaching Hospital, Ado Ekiti?
2. What is the level of knowledge of mothers on the factors influencing cardiovascular risk of preeclampsia at Ekiti State University Teaching Hospital, Ado Ekiti?

Research Hypothesis

These hypotheses were postulated for this study:

1. There is no significant association between socio-demographic characteristics (age, marital status, ethnicity, religion, educational status, employment status and income) and level of knowledge of mothers on cardiovascular risk of preeclampsia at Ekiti State University Teaching Hospital, Ado Ekiti
2. There is no significant association between socio-demographic characteristics (age, marital status, ethnicity, religion, educational status, employment status and income) and knowledge of mothers on factors influencing cardiovascular risk of preeclampsia at Ekiti State University Teaching Hospital, Ado Ekiti

Methodology

A cross-sectional descriptive design was used to make accurate and systematic description of issues on cardiovascular risk of preeclampsia in mothers who once had an index of preeclampsia. The study was carried out in Ekiti State University Teaching Hospital, Ado Ekiti. The study population comprises of 146 booked and unbooked mothers that are attending postnatal clinic and cardiology clinic at Ekiti State University Teaching hospital, Ado-Ekiti and have had an episode of preeclampsia before delivery. The sample size of 119 was drawn from the total population using Taro Yamane formula. Purposive sampling technique was used to select all post-partum mothers who once had preeclampsia in their index pregnancy and are experiencing cardiovascular challenges in their postnatal days for the study at Ekiti State University Teaching Hospital, Ado Ekiti.

A structured questionnaire was used to elicit information from the respondents; the questionnaire was developed in-line with the study objectives and research questions. It consisted of 3 sections namely Section A – C. The instrument was subjected to face and content validity. The items in the questionnaire were presented to experts in the test and

measurement, in nursing field and the supervisor for review, correction and appraisal after which necessary corrections were made. Reliability was done using internal consistency method where the developed questionnaire was administered on 20 respondents to ascertain that it is testing what it is set to test. After their responses, the instruments were collated scored and analyzed using Cronbach Alpha which yielded reliability coefficient of 0.82.

The data for this study were gathered through primary source. The researcher administered questionnaires to the respondents who were required to provide responses to the questions therein. The descriptive statistics was employed to answer the developed research questions for this study, while Chi-square was employed for inferential statistics to test the two hypotheses at 0.05 level of significance

Results

Research Question 1: What is the level of knowledge of mothers on cardiovascular risk of preeclampsia in mothers at Ekiti State University Teaching Hospital, Ado Ekiti?

Table 1: Knowledge of mothers on cardiovascular risk of preeclampsia N= 117

S/N	ITEMS	Correct Answer (%)	Wrong Answer (%)	Mean	SD
1.	Cause(s) of preeclampsia is unknown	72 (61.5)	45 (38.5)	0.62	0.49
2.	Preeclampsia is high Blood pressure above 140/90mmHg and protein in urine	68 (58.1)	49 (41.9)	0.58	0.50
3.	The occurrence of hypertension after 20weeks of gestation in a woman without prior hypertension may not lead to preeclampsia	82 (70.1)	35 (29.9)	0.70	0.46
4.	Preeclampsia may not lead to arteriosclerosis	71 (60.7)	46 (39.3)	0.61	0.49
5.	Preeclampsia and heart diseases does not have any link	71 (60.7)	46 (39.3)	0.61	0.49
6.	Mothers with heart disease can still deliver per vagina at term	66 (56.4)	51 (43.6)	0.56	0.50
7.	Preeclampsia can lead to stroke	59 (50.4)	58 (49.6)	0.50	0.50
8.	Maternal deaths can occur among severe cases of preeclampsia	76 (65.0)	41 (35.0)	0.65	0.48
9.	There is relevance between pre-eclampsia and heart problem	70 (59.8)	47 (40.2)	0.60	0.49
10.	Preeclampsia is associated with an increased risk of ischemic heart disease	86 (73.5)	31 (26.5)	0.74	0.44
11.	The risk for some future medical conditions is increased for women who experience preeclampsia	74 (63.2)	43 (36.8)	0.63	0.48

Table 1 revealed that 72(61.5%) said cause(s) of preeclampsia is unknown while 45 (38.5%) did not know. 68 (58.1%) said preeclampsia is high blood pressure above 140/90mmHg and protein in urine, while 49(41.9%) did not know. 82 respondents (70.1%) said the occurrence of hypertension after 20weeks of gestation in a woman without prior hypertension may not lead to preeclampsia while 35(29.9%) did not know. 71(60.7%) said

Preeclampsia may not lead to arteriosclerosis while 46(39.3%) did not know. 71(60.7%) said Preeclampsia and heart diseases does not have any link while 46(39.3%) did not know. 66(56.4%) respondents said Mothers with heart disease can still deliver per vagina at term while 51(43.6%) did not know. 59(50.4%) said Preeclampsia can lead to stroke while 58(49.6%) did not know. 76(65%) said Maternal deaths can occur among severe cases of preeclampsia while 41(35%) did not know. 70(59.8%) of respondents said there is relevance between pre-eclampsia and heart problem. 86 (73.5%) said Preeclampsia is associated with an increased risk of ischemic heart disease while 31(26.5%) did not know. 74(63.2%) said the risk for some future medical conditions is increased for women who experience preeclampsia while 43(36.8%) did not know.

To determine the level of knowledge of mothers on cardiovascular risk of preeclampsia, the following method was used

Range

Scores from

0 - 5 Low Knowledge

6 – 8 Moderate Knowledge

9 – 11 High Knowledge

Table 2: Level of knowledge of mothers on cardiovascular risk of preeclampsia

Level	Frequency	Percent
Low	39	33.3
Moderate	42	35.9
High	36	30.8
Total	**117**	**100.0**

Table 2 shows the level of knowledge of mothers on cardiovascular risk of preeclampsia. From the table, 39 respondents representing 33.3 percent had low level of knowledge of mothers on cardiovascular risk of preeclampsia, 42 respondents representing 35.9 percent had moderate level of knowledge of mothers on cardiovascular risk of preeclampsia while 36 respondents representing 30.8 percent had high level of knowledge of mothers on cardiovascular risk of preeclampsia. It could be concluded that most of the respondents had moderate level of knowledge of mothers on cardiovascular risk of preeclampsia.

Research Question 2: What is the level of knowledge of mothers on the factors influencing cardiovascular risk of preeclampsia at Ekiti State University Teaching Hospital, Ado Ekiti?

Table 3: Knowledge of mothers on the factors influencing cardiovascular risk of preeclampsia N= 117

S/N	ITEMS	Correct(%)	Wrong(%)	Mean	SD
1.	Chronic hypertension	30 (25.6)	87 (74.4)	1.26	0.44
2.	Advanced age	31 (26.5)	86 (73.5)	1.27	0.44
3.	Hereditary factors	19 (16.2)	98 (8.8)	1.16	0.37
4.	Obesity	15 (12.8)	102 (87.2)	1.13	0.34
5.	Previous history of preeclampsia	15 (12.8)	102 (87.2)	1.13	0.34
6.	Diabetes mellitus	23 (19.7)	94 (80.3)	1.20	0.40
7.	Hyperlipidemia	19 (16.2)	98 (83.8)	1.16	0.37
8.	Physical Inactivity	31 (26.5)	86 (73.5)	1.27	0.44
9.	Unhealthy Diet	29 (24.8)	88 (75.2)	1.25	0.43

10.	Noncompliance with drug regimen	19 (16.2)	98 (83.8)	1.16	0.37
11.	History of molar Pregnancy	15 (12.8)	102 (87.2)	1.13	0.34
12.	Multiparity	15 (12.8)	102 (87.2)	1.13	0.34
13.	Low fruit and vegetable intake	23 (19.7)	94 (80.3)	1.20	0.40

Table 3 revealed that 30(25.6%) said chronic hypertension is a factor influencing risk of preeclampsia among mothers, while 87(74.4%) said no. 31(26.5%) said advanced age is a factor while 86(73.5%) said no. 19(16.2%) said hereditary factors is a risk while 98(8.8%) said no.15(12.8%) said obesity is a factor while 102(87.2%) said no. 15(12.8) said previous history of preeclampsia is a risk factor while 102(87.2%) said no. 23 (19.7%) respondents said diabetes mellitus is a risk factor while 94 (80.3%) said no. 19(16.2%) said hyperlipidemia is a risk factor while 98(83.8%) said no. 31(26.5%) said physical inactivity is a factor while 86(73.5%) said no.29(24.8%) said unhealthy diet is a risk factor while 88{75.2%) said no. 19(16.2%) said non-compliance with drug regimen is a factor while 98(83.8%) said no. 15(12.8%) said history of molar pregnancy is also a factor while 102(87.2%) said no. 23(19.7%) said low fruit and vegetable intake is a risk factor while 94(80.3%) said no.

To determine the level of knowledge of mothers on the factors influencing cardiovascular risk of preeclampsia, the following method was used

Range

Scores from

0 - 6 Low Knowledge

7 – 9 Moderate Knowledge

10 – 13 High Knowledge

Table 4: Level of knowledge of mothers on the factors influencing cardiovascular risk of preeclampsia

Level	Frequency	Percent
Low	74	63.2
Moderate	36	30.8
High	7	6.0
Total	**117**	**100.0**

Table 4 shows the level of knowledge of mothers on the factors influencing cardiovascular risk of preeclampsia. From the table, 74 respondents representing 63.2 percent had low level of knowledge on the factors influencing cardiovascular risk of preeclampsia, 36 respondents representing 30.8 percent had moderate level of knowledge on the factors influencing cardiovascular risk of preeclampsia while 7 respondents representing 6.0 percent had high level of knowledge on the factors influencing cardiovascular risk of preeclampsia. It could be concluded that most of the respondents had low level of knowledge on the factors influencing cardiovascular risk of preeclampsia.

Test of Hypotheses

Hypothesis 1:

$H_0 1$: There is no significant association between socio-demographic characteristics (age, marital status, ethnicity, religion, educational status, employment status and income) and

level of knowledge of mothers on cardiovascular risk of preeclampsia in mothers at Ekiti State University Teaching Hospital, Ado Ekiti

Table 5: The socio-demographic relationship of level of knowledge of mothers on cardiovascular risk of preeclampsia

SN	Variable		N = 117			
			Freq.	%	X^2	Sig
1	Age	20-29 years	10	8.5	18.268	.954
		30-39 years	48	41.0		
		40-49 years	57	48.7		
		Above 50 years	2	1.7		
2.	Parity	1 – 2	22	18.8	19.977	.459
		3 – 4	86	73.5		
		5 and above	9	7.7		
3	Marital Status	Married	103	88.0	7.345	.693
		Single	14	12.0		
4.	Ethnicity	Yoruba	65	55.6	49.139	.152
		Igbo	23	19.7		
		Hausa	18	15.4		
		Others	11	9.3		
5.	Religion	Christian	86	73.5	11.680	.927
		Islam	25	21.4		
		Traditional	6	5.1		
6.	Monthly Income	Less than 50,000	56	47.9	4.151	.940
		Above 50,000	61	52.1		
7	Educational Status	No Formal Education	11	9.4	35.835	.214
		Primary	21	17.9		
		Secondary	41	35.0		
		Tertiary	44	37.6		
8	Employment Status	Unemployed	22	18.8	34.041	.279
		Civil servants	27	23.1		
		Trading	39	33.3		
		Artisan	29	24.8		

Table 5 shows that the chi-square value obtained for age is (x 2 = 18.268, p = .954); parity (x 2 =19.977, p = .459); marital status (x 2 = 7.345, p = .693); ethnicity (x 2 = 49.139, p = .152); religion (x 2 = 11.680, p = .927); monthly income (x 2 = 4.151, p = .940); educational status (x 2 = 35.835, p = .214); and employment status (x 2 = 34.041, p = .279) at the significant level of 0.05. Since these p-values were greater than 0.05 values, it could be said that age, marital status, ethnicity, religion, educational status, employment status and income are not related to level of knowledge of mothers on cardiovascular risk of preeclampsia. Therefore, the null hypothesis is accepted and retained. This implies that there was no significant association between socio-demographic characteristics (age, marital status, ethnicity, religion, educational status, employment status and income) and level of knowledge of mothers on cardiovascular risk of preeclampsia in mothers at Ekiti State University Teaching Hospital, Ado Ekiti

$H_0$2: There is no significant association between socio-demographic characteristics (age, marital status, ethnicity, religion, educational status, employment status and income) and knowledge of mothers on factors influencing cardiovascular risk of preeclampsia at Ekiti State University Teaching Hospital, Ado Ekiti

Table 6: The socio-demographic relationship of level of knowledge of mothers on factors influencing cardiovascular risk of preeclampsia

SN	Variable		N = 117			
			Freq.	%	X^2	Sig
1	Age	20-29 years	10	8.5	36.653	.187
		30-39 years	48	41.0		
		40-49 years	57	48.7		
		Above 50 years	2	1.7		
2.	Parity	1 – 2	22	18.8	25.063	.199
		3 – 4	86	73.5		
		5 and above	9	7.7		
3	Marital Status	Married	103	88.0	4.729	.909
		Single	14	12.0		
4.	Ethnicity	Yoruba	65	55.6	134.769	.000*
		Igbo	23	19.7		
		Hausa	18	15.4		
		Others	11	9.3		
5.	Religion	Christian	86	73.5	8.603	.987
		Islam	25	21.4		
		Traditional	6	5.1		
6.	Monthly Income	Less than 50,000	56	47.9	13.943	.176
		Above 50,000	61	52.1		
7	Educational Status	No Formal Education	11	9.4	26.885	.629
		Primary	21	17.9		
		Secondary	41	35.0		
		Tertiary	44	37.6		
8	Employment Status	Unemployed	22	18.8	31.829	.376
		Civil servants	27	23.1		
		Trading	39	33.3		
		Artisan	29	24.8		

Table 6 shows that the chi-square value obtained for age is (x 2 = 36.653, p = .187); parity (x 2 = 25.063, p = .199); marital status (x 2 = 4.729, p = .909); ethnicity (x 2 = 134.769, p = .000); religion (x 2 = 8.603, p = .987); monthly income (x 2 = 13.943, p = .176); educational status (x 2 = 26.885, p = .629); and employment status (x 2 = 31.829, p = .376) at the significant level of 0.05. Since these p-values were greater than 0.05 value except for ethnicity with p-value less than 0.05, it could be said that age, marital status, religion, educational status, employment status and income are not related to knowledge of mothers on factors influencing cardiovascular risk of preeclampsia in mothers but ethnicity is related to knowledge of mothers on factors influencing cardiovascular risk of preeclampsia in mothers. Therefore, the null hypothesis is accepted and retained. This implies that there was

no significant association between socio-demographic characteristics (age, marital status, religion, educational status, employment status and income) and knowledge of mothers on factors influencing cardiovascular risk of preeclampsia at Ekiti State University Teaching Hospital, Ado Ekiti.

Discussion

The findings of the study revealed the level of knowledge of mothers on cardiovascular risk of preeclampsia in mothers at Ekiti State University Teaching Hospital, Ado Ekiti. Most of the respondents had moderate level of knowledge on cardiovascular risk of preeclampsia as 39 respondents representing 33.3 percent had low level of knowledge on cardiovascular risk of preeclampsia, 42 respondents representing 35.9 percent had moderate level of knowledge on cardiovascular risk of preeclampsia while 36 respondents representing 30.8 percent had high level of knowledge on cardiovascular risk of preeclampsia. The findings of Hu, Ha and Xu (2017) contradicted the present finding on level of knowledge of mothers on cardiovascular risk of preeclampsia as they concluded that most women had low level of knowledge of cardiovascular risk of preeclampsia.

The findings of the study revealed the level of knowledge of mothers on factors influencing cardiovascular risk of preeclampsia at Ekiti State University Teaching Hospital, Ado Ekiti. Most of the respondents had low level of knowledge on factors influencing cardiovascular risk of preeclampsia as 74 respondents representing 63.2 percent had low level of knowledge on the factors influencing cardiovascular risk of preeclampsia, 36 respondents representing 30.8 percent had moderate level of knowledge on the factors influencing cardiovascular risk of preeclampsia while 7 respondents representing 6.0 percent had high level of knowledge on the factors influencing cardiovascular risk of preeclampsia. In consonance with this study, Ross, et al (2019) found out that increasing age and physical inactivity are associated with cardiovascular risk of preeclampsia while most women lack the adequate knowledge of factors influencing cardiovascular risk of preeclampsia.

There was no significant association between socio-demographic characteristics (age, marital status, ethnicity, religion, educational status, employment status and income) and level of knowledge of mothers on cardiovascular risk of preeclampsia in mothers at Ekiti State University Teaching Hospital, Ado Ekiti. The chi-square value obtained for age is (x^2 = 18.268, p = .954); parity (x^2 = 19.977, p = .459); marital status (x^2 = 7.345, p = .693); ethnicity (x^2 = 49.139, p = .152); religion (x^2 = 11.680, p = .927); monthly income (x^2 = 4.151, p = .940); educational status (x^2 = 35.835, p = .214); and employment status (x^2 = 34.041, p = .279) at the significant level of 0.05. In consonance with this finding, Hu, Ha and Xu (2017) found out that socio-demographic of respondents were not associated with level of knowledge of cardiovascular risk of preeclampsia.

There was no significant association between socio-demographic characteristics (age, marital status, ethnicity, religion, educational status, employment status and income) and knowledge of mothers on factors influencing cardiovascular risk of preeclampsia except ethnicity that was associated with knowledge of mothers on factors influencing cardiovascular risk of preeclampsia at Ekiti State University Teaching Hospital, Ado Ekiti. The chi-square value obtained for age is (x^2 = 36.653, p = .187); parity (x^2 = 25.063, p = .199); marital status (x^2 = 4.729, p = .909); ethnicity (x^2 = 134.769, p = .000); religion (x^2 = 8.603, p = .987); monthly income (x^2 = 13.943, p = .176); educational status (x^2 = 26.885, p = .629); and employment status (x^2 = 31.829, p = .376) at the significant level of 0.05. The findings of Ross, et al (2019) contradicted the present finding as they concluded that socio-demographic

characteristics of respondents were associated with factors influencing cardiovascular risk of preeclampsia.

Conclusion

Sequel to the findings of this study, it is concluded that most of the respondents had moderate level of knowledge on cardiovascular risk of preeclampsia while most of the respondents had low level of knowledge on factors influencing cardiovascular risk of preeclampsia.

Recommendations

Based on the findings of this study, the following recommendations were made;

1. There should be increased awareness and education of the general population on the prevention and control of risk factors and training of health professionals on appropriate diagnosis and management of cardiovascular disease (CVD)
2. Nurses and Midwives should counsel mothers with history of preeclampsia on cardiovascular risk factors to improve their health and prevent cardiovascular complications.

References

Ajah, L.O., Ozonu, N.C., Ezeonu, P.O., La warn, L.O., Obuna, J .A, &Onwe, E.O. (2016). Thefeto-maternal outcome of preeclampsia with severe features and eclampsia in Abakaliki, Southeast Nigeria.*JClinDiagRes,* 18-21.

Bilano V.L, Ota, E, Ganchimeg, T., et al., (2015). Risk factors of pre- eclampsia/eclampsiaand its adverse outcomes in low- and middle-income countries: a WHO secondary analysis. *PLoS One*,9(3): e91198.

Hu H., Ha S., &Xu, X. (2017). Ozone and Hypertensive Disorders of Pregnancy in Florida: Identifying Critical Windows of Exposure. *Environ Res* 153(1), 120— 125. doi: 10.1016/j.envres .2016.12.002.

Hutcheon, J.A., Lisonkova, S., & Joseph, K.S. (2017).Epidemiology of pre-eclampsia and the other hypertensive disorders of pregnancy .*Best Pract&ResClinObstetGyn* 25(1), 391-403. Doi: 10.1016/j.bpobgyn.2011.01.006.

Itoh, M., Were, F., &Owidhi, M, et al., (2017).Incidence of Pregnancy-Associated Hypertension and Preeclampsia in a cohort of Kenyan Women .*Annals of Gynecology and Obstetrics.*1(1): 3-4.

Logan G. (2020).Replication Data for: Determinants of preeclampsia and eclampsiaamong women delivering in county hospitals in Nairobi, Kenya. HarvardDataverse, http://www .doi .org/10.7910/DVN/BYFL3J

Otieno, D.A.N (2017).Factors contributing to adverse outcomes of preeclampsia among pregnant women attending antenatal clinics in Kibera slums. NAIROBI.

Ross, K.M., Schetter, D., McLemore, M.R., Chambers, B.D. &Jelliffe-Pawlowski, L. (2019).Socio-economic Status, Preeclampsia Risk and Gestational Length in Black and White Women. *J Racial Ethn Health Disparities*.Doi: 10.1007/s40615-019-00619-3

Wallis, A.B., Saftias, A.F., Hsia, J., &Atrash, H.K. (2018).Secular Trends in the Rates of Preeclampsia, Eclampsia, and Gestational Hypertension, United States, 1987-2004 *Am JHypertension,* 21 (5), 521-526.

World Health Organisation (2016). Fact Sheets http://www.who.int/news-room/factsheets/detail/noncommunicable-diseases accessed 14/08/2020

Ying, W., Catov, J.M., &Ouyang, P. (2019).Hypertensive Disorders of Pregnancy and Future Maternal Cardiovascular Risk.*Am. Heart Assoc*. 7:e009382. DOI: 10.1161/JAHA. 118.009382.

Cite this article:

Author(s), AROWOSOLA, Foluke Ebunoye (RN, RM, BNSc.), Prof. SOTUNSA, John Obafemi,(2021). "Factors Influencing Cardiovascular Risk of Preeclampsia in Mothers at Ekiti State University Teaching Hospital, Ado Ekiti, Nigeria". Name of the Journal: International Journal of Academic Research in Business, Arts and Science, (IJARBAS.COM), P, 51- 63. **DOI**: http://doi.org/10.5281/zenodo.4780115 , Issue: 5, Vol.: 3, Article: 7, Month: May, Year: 2021. Retrieved from https://www.ijarbas.com/all-issues/

Published by

AND

ThoughtWares Consulting & Multi Services International (TWCMSI)