

Research paper

Knowledge of Pre-Eclampsia and Eclampsia among Ladies and Women in Libraries in Nigeria

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Pre-eclampsia and eclampsia(P/E) has caused an alarming rate of death and complications on pregnant ladies and women during child bearing with its significant rate in developing countries like Nigeria. To investigate library ladies and women knowledge of pre-eclampsia and eclampsia in Nigeria. Survey research design was used for the study as self-structured questionnaire administered through google form was the instrument. 355 Association of women librarians in Nigeria formed the population of the study while descriptive statistics was used for the analysis. Findings showed that respondents are knowledgeable of pre-eclampsia/eclampsia. Their knowledge on warning and danger signs is high. Their level of knowledge of remedies to pre-eclampsia/eclampsia is very high. Despite how knowledgeable respondents may seem, it is certain that some of them do not know or have in-debt knowledge of it which makes it essential to create the knowledge to avert impending doom. Medical experts/personnel in other to save the future lives of ladies and women working in the libraries in Nigeria need to conduct seminars or symposiums in the libraries and equally add more advertisements via different social media outlets for greater knowledge of the endemic disease - pre-eclampsia and eclampsia.

Keywords: Eclampsia, Knowledge, Ladies, Libraries, Nigeria, Pre-eclampsia

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INTRODUCTION

Pre-eclampsia and eclampsia among pregnant women is seen by different scholars as, pregnancy-specific disorder with high blood pressure and significant proteinuria and swelling of both feet and face or a pregnancy - specific hypertensive disease that results in morbidity and mortality on the mother as well as the growing fetus (Olaoye, Oyerinde, Elebuji & Ologun 2019, Mekie et al 2022, Cifkova 2023, & Vinayagam 2022). Pre-eclampsia is one of the maternal morbidity and mortality that disproportionately affects pregnant women in low and middle-income countries where access and quality of health services are limited. Pre-eclampsia occurs after two weeks of gestation, most cases

of postpartum pre-eclampsia are said to take place within 48 hours of delivery (Hauspurg & Jeyabalan, 2020). Incidentally, if untreated, will generate to eclampsia. In Nigeria, pre-eclampsia/eclampsia make up over 50% of the country's maternal mortality of pregnant women (Musa et al 2018, Akaba et al 2021, & Okonofua et al, 2024).

Hypertensive disorders have become the country's leading cause of maternal mortality, accounting for 29% of these deaths in tertiary hospitals (Sripad et al, 2019). Studies have equally shown that ninety-nine percent of these deaths occur in low- and middle-income countries and are more common among poor, rural women than urban women (Oladapo et al, 2016 & Okonofua et al 2024). Probably the disparity between the rich and the poor living in urban and rural area respectively do not have access to good health facilities.

Nigeria has a high prevalence of pre-eclampsia and eclampsia of between 2% to 16.7%. The incidence of eclampsia reported varies in different parts of Nigeria. Eclampsia contributes 31.3%-43.1% to maternal death in the Northern part of the country, with a maternal mortality ratio (MMR) of 1,200 per 100,000 live births. In the south-west and south-south parts of the country, the maternal mortality ratio is lower; it is about 500 per 100,000 live births. Eclampsia accounts for 27.5%-40% of maternal deaths in this part of the country (Makinde & Akinboye, 2021 & Akeju et al, 2016). A study carried out by Akadriand Osaigbovoh (2020) on the prevalence of hypertensive disorder of pregnancy in Babcock University Teaching Hospital, Ilishan-Remo, Ogun State, Nigeria, revealed that 55 (4.9%) women had hypertensive disorders in pregnancy and Thirty-four (75.5%) of this women had pre-eclampsia/ eclampsia. Young ladies are even more affected nowadays as supported by the study of Poonyane(2015) whose result showed that young women were susceptible to pre-eclampsia as majority of the women with severe pre-eclampsia were between the ages 15-34 years, thus demonstrating that young women were most affected by severe pre-eclampsia.

Studies have shown that major cause is unknown but some risk factors could include; reduced blood flow, twin gestation, improper functioning of the placenta, poor nutrition, high body mass index and/or genetic factors (Frank et al, 2020).The clinical manifestations would be: abdominal pain, headaches, fetal growth restriction, hypertension, proteinuria, reduced urine or no urine output, haemolysis and seizures. Other signs include visual disturbances (blurred), altered mental status, blindness, dyspnea, edema, epigastric or right upper quadrant abdominal pain, and weakness (Chanda, 2023).

Libraries in Nigeria are blessed with men, ladies and women rendering different degrees of services to the end users. The life work-balance of these professionals should be paramount and as such, any identified danger specie need to be exposed. Pre-eclampsia and eclampsia has no borders of who to affect provided the lady or woman gets pregnant. Therefore, the ladies and women working in the libraries are not immune of the pre-eclampsia and eclampsia and as such subjected to knowing and understanding what the ailment is, the dangers, and things to do to remedy the menace. Studies have shown of a higher degree of ladies/women working in the library over and above their male counterparts as seen in the studies of Olarenwaju (2020) whose result of study showed that more female librarians occupied leadership roles and others at lower levels. There are more women professors, doctors, and heads of libraries in Nigeria. This is an evidence of their die-hard labour, to move the society forward. This presupposes that if correct knowledge of this endemic disease is not shared among them, the libraries in Nigeria may fall victim of the pre-eclampsia and eclampsia among her female counterparts.

Statement of the Problem

The alarming rate of death and complications pregnant women go through create room for concern. Sustainable Development Goal (2023) estimated that globally 800 women died every day from pregnancy or childbirth in 2020. Many studies have identified pre-eclampsia and eclampsia as the major cause of maternal and perinatal morbidity and mortality among pregnant women and its occurrence is still significant in developing world including Nigeria. Incidentally, all ladies and women are expected and anticipated to go through pregnancy and child bearing where pre-eclampsia and eclampsia hangs in waiting if not properly managed, most especially some other linked factors associated with it thereby creating a great challenge to pregnant women.

However, the death and complications would have been avoided if pregnant women have the full knowledge and understanding of pre-eclampsia/eclampsia symptoms during pregnancy.To this effect, to have the knowledge of the ailment is pivotal to the lives of ladies and women and in this context, those working in our libraries in Nigeria. Having the true knowledge will guide and enable library ladies and women to make informed decision and be free from the endemic hands of pre-eclampsia/eclampsia. It is important that these group of women are knowledgeable about all symptoms that send red flag and need urgent attention. The knowledge of pre-eclampsia/eclampsia is very necessary for all women librarians. It is imperative that the knowledge of pre-eclampsia and eclampsia is created or make available to the ladies and women working in the libraries hence they are all prone to be pregnant. They need to know positive things to do or eat to avert the impending doom. And being that virtually all studies on this topic tilt toward knowledge of pregnant women attending antenatal clinics and none on ladies and women in Nigerian libraries, this paper aims to bridge the gap.

Objective of the Study

The general objective of study is to investigate library ladies and women knowledge of pre-eclampsia and eclampsia in Nigeria. Specific objectives are as follows:

1. To find out the level of knowledge of pre-eclampsia and eclampsia among ladies and women in libraries in Nigeria
2. To identify the knowledge of warning signs and dangers attached to pre-eclampsia and eclampsia among ladies and women in libraries in Nigeria
3. To identify the knowledge of remedies of pre-eclampsia and eclampsia among ladies and women in libraries in Nigeria

Research Questions

1. What is the level of knowledge of pre-eclampsia and eclampsia among ladies and women in libraries in Nigeria?
2. What are the knowledge of warning signs and dangers attached to pre-eclampsia and eclampsia among ladies and women in libraries in Nigeria?
3. What knowledge of the remedies of pre-eclampsia and eclampsia do ladies and women in libraries in Nigeria have?

Literature Review

Pre-eclampsia and Eclampsia

Eclampsia by definition is that condition in which a pregnant woman suffers one or more convulsions from high blood pressure (Laskowska, 2023). It is indeed the development of seizures in a woman with severe pre-eclampsia with death rate of 3% (Chanda, 2023). Most times, this incident occurs at first pregnancy either with teenagers and/or women over 40 years of age. Also, Makinde and Akinboye (2021) explained eclampsia as a hypertensive disorder of pregnancy; it is a major global health problem and a common medical complication of pregnancy among pregnant women residing in low and middle income countries. In many developing countries such as Nigeria, eclampsia remains a significant contributor to adverse maternal and perinatal outcomes despite all measures to reduce its incidence and impact

According to Begum (2023) pre-eclampsia formally called toxemia, happens when a pregnant woman has high blood pressure, too much protein in the urine, and also swelling of legs, feet, and hands. It can range from mild to severe called eclampsia. It usually happens late in pregnancy, though it can come earlier or just after delivery. Eclampsia is a more critical or advancement of pre-eclampsia that leads to seizures on pregnant women as a result of high blood pressure capable of the death of the mother and the baby. The symptoms of pre-eclampsia include blood pressure above 140/90; weight gain; shoulder pain; belly pain (upper right side); severe headaches; change in reflexes; peeing less or not at all; dizziness; trouble breathing and severe vomiting and nausea. It is broadly defined by hypertension and proteinuria, and this includes pre-eclampsia and eclampsia with the presence of convulsions not attributable to other neurologic diseases.

Knowledge and Pre-eclampsia/eclampsia

Mekie et al (2022) found that the majority of the participants in the study believed pre-eclampsia as a pregnancy-specific hypertensive disease and mainly associated it with overweight and nutritional problems. Mir (2023) studied education interventions and pre-eclampsia/eclampsia knowledge among pregnant women using databases method to recruit information and the result of the study showed that failure to educate pregnant women about pre-eclampsia can result in missed opportunities for diagnosis and treatment of pre-eclampsia complications.

Kishenand Rao (2022) conducted a study on Knowledge, attitude and practice of women towards Pre-eclampsia in India" resulted that most of the participants had a low knowledge and attitude of Pre-eclampsia and Eclampsia. Tamma et al (2023) found out in their study on maternal hypertensive mother's knowledge, attitudes and misconceptions on hypertension in pregnancy that almost all the respondents had heard of high blood pressure, or "BP" and knew it as a health condition commonly associated with the elderly, but not with younger people or even pregnant women. Most of them did not know that "BP" could complicate pregnancy and lead to adverse outcomes. They also described BP as when one's heart is beating very fast, shortness of breath and blood pressure going up.

Research has shown that women perceived hypertensive disorders in pregnancy (HDP) to be a spiritual condition which required spiritual treatment, causing a delay in seeking medical care. The role of traditional, religious and spiritual conceptions in HDPs have also been described by other researchers. In Northern Nigeria, the belief that pre-eclampsia is caused by "isaka" (spirits) has been reported by Osungbade and Ige(2011). A study from Ghana revealed that

pregnant women together with their care providers commonly expressed the need for spiritual protection, which in some instances involved the women being kept in churches or prayer camps throughout their entire period of pregnancy until delivery (Dako-Gyeke et al, (2013); cited in Tamma et al (2023). Above all, women's knowledge level about hypertensive disorders in pregnancy (HDP) which is pre-eclampsia/eclampsia is low with substantial burden of misconception, though lot of the women had regular antenatal care visits and received some form of education on diet and danger signs in pregnancy. HDPs were commonly perceived as a consequence of "thinking too much".

Agbeno et al (2022) equivocally pointed that the remarkably low proportion of pregnant women with adequate knowledge of hypertensive disorders of pregnancy in the study is worrisome because of its potential adverse implication for the health of mothers and their babies. Romuald et al (2019) discovered through their study that more than half of our patients knew about pre-eclampsia and eclampsia. In 41% of cases, patients attributed excessive salt intake as a cause of high blood pressure during pregnancy and in 20% secondary to stress. Headache was the best-known symptom of patients. Signs of danger such as epigastric pain, genital bleeding, visual disturbances, convulsions and decreased sensation of fetal movements are not well known to patients. One-third of the patients also, are not aware that the signs of danger of pre-eclampsia were lethal. Regarding fetal complications, the occurrence of fetal death in utero was the best known. The majority of patients were aware that blood pressure measurements and urine dipstick testing were mandatory during pregnancy follow-up. To prevent pre-eclampsia, 46.07% thought that reducing salt intake would reduce the occurrence of pre-eclampsia. Some factors to put to knowledge that may put one at a higher risk are: History of high blood pressure, kidney disease or diabetes; Expecting multiples; Family history of pre-eclampsia; Autoimmune conditions like lupus and Obesity.

Knowledge of the warning and danger signs of Pre-eclampsia/eclampsia

Different studies have identified that warning signs and dangers of pre-eclampsia/eclampsia include but not limited to the following - headache, dizziness, nausea and vomiting, epigastric pain, diminution of perception of foetal movement, uterine contraction, vaginal bleeding, edema, weakness, convulsion, neck pain, vision disorder, sweating, etc (Lim & Steinberg, 2022; & Web MD, n.d) . Every lady and woman need to have this knowledge ahead of time even before getting married so as to monitor all behavioural and dietary intakes to avoid the dangers ahead during pregnancy. Improving the monitoring of pregnancy with information and education of patients on pathologies that may occur during pregnancy would reduce maternal and neonatal morbidity and mortality in Madagascar (Romuald et al, 2019). In most developing countries, women and the community believe that high blood pressure during pregnancy is due to a stress of everyday life (Akeju et al 2016; Vidler et al, 2016; Boene et al, 2016 & Khowaja et al, 2016). In India, Vidler et al, reported that dietary deficiency stress is the main cause cited by patients. In Nigeria, depression and stress were considered to be the leading cause of pre-eclampsia/eclampsia (Akeju et al, 2016). In Pakistan, stress and fatigue are reported to be the cause of the patients (Khowaja et al, 2016). In our population, apart from stress, salt intake is considered the cause of high blood pressure in 41% of cases. 84% of our population did not know that pre-eclampsia was a pregnancy-related condition. High maternal age, heredity, overweight and abnormal placentation may be the cause of pre-eclampsia reported by some patients. Other risk factors, such as the history of hypertension, pre-eclampsia, primiparity, prim paternity, and diabetes cited in the literature, are not known by patients (Romuald et al, 2019).

Knowledge of the Remedies of Pre-eclampsia/eclampsia

World Health Organization (WHO, 2023), has affirmed that among the hypertensive disorders that complicate pregnancy, pre-eclampsia and eclampsia stand out as major causes of maternal and perinatal mortality and morbidity. The majority of deaths due to pre-eclampsia and eclampsia are avoidable through the provision of timely and effective care to the women presenting with these complications. Optimizing health care to prevent and treat women with hypertensive disorders is a necessary step towards achieving the Millennium Development Goals. WHO has developed the present evidence-informed recommendations with a view to promoting the best possible clinical practices for the management of pre-eclampsia and eclampsia. Pre-eclampsia educational programme is effective in improving pre-eclampsia awareness and some pregnancy outcomes. Midwifery and nursing educators are highly encouraged to train midwives and nurses to be effective health professionals. Health educational programmes need to be designed by professionals based on an updated evidence and women's needs. It is of importance that these programmes focus on involving women in their health care by self-monitoring and providing women with the necessary resources to improve pregnancy outcomes. The U.S. Preventive Services Task Force recommends that women at high risk for preeclampsia take low-dose aspirin starting after 12 weeks of pregnancy to prevent the condition from occurring (US Preventive Services Task Force, 2015). To remedy the risk of getting pre-eclampsia/eclampsia, the following steps must be adopted - Losing weight if you have overweight/obesity (prior to pregnancy-related weight gain); Controlling your blood pressure and blood sugar (if you had high blood pressure or diabetes prior to pregnancy); Maintaining a regular exercise routine; Getting enough sleep;

Eating healthy foods that are low in salt and avoiding caffeine. The study of Adeyeye et al (2023) indicated that one of the most adopted way to prevent pre-eclampsia is taking a baby aspirin daily to decrease the risk of developing pre-eclampsia by approximately 15%. Dulay (2024) in his research identified that treatment is usually with IV magnesium sulfate and delivery at term, or earlier for maternal or fetal complications. Pre-eclampsia occurs in 4.6% and eclampsia in 1.4% of deliveries worldwide. Pre-eclampsia and eclampsia develop after 20 weeks gestation, although most cases occur after 34 weeks. Meta-analyses of randomized trials have shown that low-dose aspirin therapy in women with certain risk factors reduces the rate of severe pre-eclampsia and fetal growth restriction (Roberge et al, 2017 & Meher et al, 2017).

Methodology

This study adopted a survey research design to harness the opinion of the respondents through a self-structured Google form questionnaire. The population of the study comprised of all members of Association of Women Librarians in Nigeria (AWLIN) with the total number of 355 registered in their whatsapp group. The questionnaire went through a reliability test and the result showed that knowledge has 0.955 to prove its Cronbach's alpha coefficient. The questionnaire was distributed to the respected respondents through the whatsapp group and a total of 306 responded out of 355 signifying 86.2% response rate. The filled and returned questionnaires were analyzed using descriptive statistics (frequencies, percentages, mean, and standard deviation) for the research questions.

Results

Table 1: Socio-Demographic Data of Respondents

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Characteristics	Classification	Frequency	Percentage
Age	21-25yrs	30	9.8
	26-30yrs	41	13.4
	35-40yrs	78	25.5
	41yrs and above	157	51.3
Religion	Christianity	250	81.7
	Islam	50	16.3
	Traditional	6	2.0
Ethnicity	Yoruba	127	41.5
	Igbo	104	34.0
	Hausa	24	7.8
	Others	51	16.7
Marital status	Single	18	5.9
	Married	267	87.3
	Others	21	6.9
Level of Education	Bsc/HND	87	28.4
	Masters	131	42.8
	Secondary	4	1.3
	Ph.D	84	27.5
Number of children	None yet	30	9.8
	1-3	205	67.0
	4-6	69	22.5
	more than 6	2	.7

— **Source: researcher's field work, 2024**

The demographic information presented on table 1 revealed that 157 (51.3%) of the respondents were 41 years and above, 250 (81.7%) of the respondents were Christians, 127 (41.5%) were from Yoruba ethnicity, while 104 (34%) were of the Igbo ethnicity. As revealed also, 267 (87.3%) of the respondents were married, and 131 (42.8%) had acquired masters degree; and on number of children, 205 (67%) of the respondents had 1-3 children.

Question one: What is the level of knowledge of pre-eclampsia and eclampsia among ladies and women in libraries in Nigeria?

Table 2: knowledge of pre-eclampsia and eclampsia

knowledge of pre-eclampsia/eclampsia of ladies and women	YES (%)	No (%)
Pre-eclampsia/eclampsia is when a woman has high blood pressure during pregnancy	228(74.5)	78(25.5)
Have you heard of pre-eclampsia and eclampsia before?	211(69)	95(31)
I received information about pre-eclampsia/eclampsia during prenatal care visit at the hospital	169(55.2)	137(44.8)
I received knowledge of pre-eclampsia and eclampsia from social media	125(40.8)	181(59.2)
I heard of pre-eclampsia and eclampsia from fellow women/friends	118(38.6)	188(61.4)

Source: Researcher's fieldwork, 2024

The result on table 2 reveals that participants in the study are knowledgeable about pre-eclampsia and eclampsia. This is verified by the responses as 228 (74.5%) of the respondents agreed that Pre-eclampsia/eclampsia is when a woman has high blood pressure during pregnancy. Similarly, 211 (69%) of the respondents agreed that they have heard of pre-eclampsia and eclampsia before. And 169 (55.2%) indicated that they received information about pre-eclampsia/eclampsia during prenatal care visit at the hospital. On the contrary, 181 (59.2%) of the respondents indicated that they did not receive knowledge of pre-eclampsia and eclampsia from social media; and another 188 (61.4%) of the respondents indicated that they did not hear of pre-eclampsia and eclampsia from fellow women/friends

Question two: What are level the knowledge of warning signs and dangers attached to pre-eclampsia and eclampsia among ladies and women in libraries in Nigeria?

Table 3: knowledge of warning signs of pre-eclampsia/eclampsia

knowledge of warning signs of pre-eclampsia/eclampsia	Strongly Agree (%)	Agree (%)	Disagree (%)	Strongly Disagree (%)	Mean	SD
Hypertension	171(55.9)	99(32.4)	24(7.8)	12(3.9)	3.40	.797
Edema	146(47.7)	118(38.6)	36(11.8)	6(2)	3.32	.757
Death	145(47.4)	117(38.2)	32(10.5)	12(3.9)	3.29	.808
Family history	121(39.5)	141(46.1)	38(12.4)	6(2)	3.23	.739
Weakness	116(37.9)	143(46.7)	41(13.4)	6(2)	3.21	.742
Headache	128(41.8)	108(35.3)	52(17)	18(5.9)	3.13	.899
Seizures	119(38.9)	125(40.8)	42(13.7)	20(6.5)	3.12	.881
Diabetes	115(37.6)	105(34.3)	59(19.3)	27(8.8)	3.01	.962
Dyspnea	75(24.5)	156(51)	57(18.5)	18(5.9)	2.94	.816
Visual disturbances (blurred)	77(25.2)	151(49.3)	57(18.6)	21(6.9)	2.93	.842
Altered mental status	82(26.8)	129(42.2)	83(27.1)	12(3.9)	2.92	.832
Proteinuria	89(29.1)	115(37.6)	84(27.5)	18(5.9)	2.90	.890
Fetal growth restriction	69(22.5)	145(47.4)	80(26.1)	12(3.9)	2.89	.795
Abdominal pain	89(29.1)	110(35.9)	78(25.5)	29(9.5)	2.85	.951
Haemolysis	54(17.6)	143(46.7)	96(31.4)	14(4.6)	2.77	.789
Epigastric pain	58(19)	129(42.2)	101(33)	18(5.9)	2.74	.831
Reduced urine/no urine output	65(21.2)	110(25.9)	110(35.9)	21(6.9)	2.72	.876
Blindness	42(13.7)	109(35.6)	122(39.9)	33(10.8)	2.52	.861
Overall Mean					2.99	.837

Source: Researcher's fieldwork, 2024

Decision rule: if mean is 1-1.74 =very low, 1.75-2.49=Low, 2.5-3.24=High, 3.25-40=very high.

The result presented on table 3 reveals the level of knowledge of warning signs and dangers of pre-eclampsia and eclampsia among ladies and women in libraries. The result revealed that their level of knowledge of warning signs and dangers is high (overall mean 2.99, SD=.837). This implies that females in libraries are knowledgeable about the warning signs and dangers of pre-eclampsia and eclampsia. The result further showed that the respondents were knowledgeable as they agreed that hypertension ($M=3.40$), Edema ($M=3.32$), Death ($M=3.29$), family history ($M=3.23$), and weakness ($M=3.21$), were warning signs of pre-eclampsia and eclampsia.

Question 3: What is the level of knowledge of the remedies of pre-eclampsia and eclampsia among ladies and women in libraries in Nigeria?

Table 4: knowledge of remedies of pre-eclampsia/eclampsia

knowledge of remedies of pre-eclampsia/eclampsia in ladies and women	Strongly Agree (%)	Agree (%)	Disagree (%)	Strongly Disagree (%)	Mean	SD
Timely detection of disease	202(66)	98(32)	6(2)		3.64	.520
Compliance with medical professional advice	202(66)	98(32)	6(2)		3.64	.520
Eating healthy foods	193(63.1)	107(35)	3(1)	3(1)	3.60	.565
Control of Blood pressure	187(61.1)	113(36.9)	6(2)		3.59	.531
Regular exercise	172(56.2)	125(40.8)	9(2.9)		3.53	.556
Control of sugar level	172(56.2)	122(39.9)	12(3.9)		3.52	.574
Less or none use of salt	169(55.2)	110(35.9)	27(8.8)		3.46	.653
Avoidance of caffeine usage	157(51.3)	131(42.8)	15(4.9)	3(1)	3.44	.636
Loss of weight if over weight	129(42.2)	138(45.1)	39(12.7)		3.29	.681
Taking of low dose of aspirin from 12 wks of pregnancy	111(36.3)	120(39.2)	60(19.6)	15(4.9)	3.07	.868
Overall Mean					3.48	.610

Source: Researcher's fieldwork, 2024

Decision rule: if mean is 1-1.74 =very low, 1.75-2.49=Low, 2.5-3.24=High, 3.25-40=very high.

As presented on table 4, the level of knowledge of the remedies to pre-eclampsia and eclampsia is very high (overall mean=3.48, SD=.610) among ladies and women in libraries. This implies that the ladies and women in libraries are knowledgeable of the preventive and curative remedies to pre-eclampsia and eclampsia. As seen on table (iv) the respondents agreed that timely detection of disease ($M=3.64$), compliance with medical professional advice ($M=3.64$), and eating healthy foods ($M=3.60$) were some of the remedies to pre-eclampsia and eclampsia

Discussion of Findings

In research question one of the study that sorted the level of knowledge of pre-eclampsia and eclampsia among ladies and women in libraries in Nigeria, the overall result indicated that the participants of the study (ladies and women in Libraries in Nigeria) are knowledgeable about pre-eclampsia and eclampsia. This finding somehow differed with the finding of Kishen et al (2022) who conducted a study on "Knowledge, attitude and practice of women towards Pre-eclampsia in India" and his result showed that most of the participants had a low knowledge of Pre-eclampsia and Eclampsia. Also, the result of this study is not in harmony with the findings of Agbeno et al (2022) who equivocally pointed that the low proportion of pregnant women with adequate knowledge of hypertensive disorders of pregnancy in the study is worrisome for its adverse implication for the health of mothers and their babies. However, this study finding is in accordance with the finding of Romuald et al (2019) who discovered through their study that more than half of their patients were knowledgeable about pre-eclampsia and eclampsia. Certain parameters could champion the knowledgeability of ladies and women in Nigerian libraries about pre-eclampsia and eclampsia like the environment, and level of education to be precise. The participants execute and discharge their daily services in educational environment or communities where health care service centres and university teaching hospitals are available. This can boost their knowledge. More so, educational qualification of the study population are of more graduates (98%) ranging from first degree to doctorate degrees which could cushion the ladies and women knowledge about pre-eclampsia and eclampsia.

Research question two found out the level of knowledge of warning signs and dangers of pre-eclampsia and eclampsia among ladies and women in libraries in Nigeria. The result revealed that their level of knowledge of warning signs and dangers is high. This finding is in agreement with different scholars who discovered that improving of

monitoring of pregnancy with information and education of patients on pathologies that occur during pregnancy increases the ladies and women knowledge of danger and warning signs. Also, they found out that salt intake, high maternal age, heredity, overweight and diabetes are among danger and warning signs of pre-eclampsia and eclampsia among pregnant women (Romuald et al, 2019). Furthermore, Akeju et al (2016) affirmed in their studies that ladies and women knowledge of high blood pressure during pregnancy could be caused by stress and depression which easily leads to pre-eclampsia and eclampsia. Ladies and women in libraries in Nigeria may have acquired these warning and danger sign through their surrounding information about the dangerous ailment and thereby take precaution.

Research question three sought the level of knowledge of the remedies to pre-eclampsia and eclampsia by ladies and women in libraries in Nigeria and the result showed that their knowledge is very high (overall mean=3.48, SD=.610). This implies that the ladies and women in libraries are knowledgeable of the preventive and curative remedies to pre-eclampsia and eclampsia. The result finding agrees with the findings of other researchers. For instance, the study of Adeyeye et al (2023) indicated that one of the most adopted way to prevent pre-eclampsia is taking a baby aspirin daily to decrease the risk of developing pre-eclampsia by approximately 15%. Dulay (2024) in his research identified that treatment is usually with IV magnesium sulfate and delivery at term, or earlier for maternal or fetal complications. In addition, this research finding concurs with the WHO (2023) finding that majority of deaths due to pre-eclampsia and eclampsia are avoidable through the provision of timely and effective care to the women presenting with these complications.

Conclusion

The knowledge of pre-eclampsia and eclampsia by ladies and women generally is pivotal to their eminent living and especially on the ladies and women working in libraries in Nigeria. Having this knowledge will influence their decision making in terms of what to eat, drink and their behavioural tendencies. Knowing and understanding pre-eclampsia and eclampsia even before marriage and pregnancy is advantageous to the lives of our ladies and women as to maintain a good living to avert the predicament on the long run.

Above all, the study on the level of knowledge of ladies and women in libraries in Nigeria on pre-eclampsia and eclampsia showed that the participants are knowledgeable about it. The study equally revealed that the level of knowledge of ladies and women on warning and danger signs is high. Finally, the study found that the level of knowledge of the remedies to pre-eclampsia and eclampsia among ladies and women in libraries in Nigeria is very high. The study, concluded that ladies and women in libraries in Nigeria are knowledgeable of pre-eclampsia and eclampsia, its warning and danger signs as well as its remedies.

Recommendation

The study recommended that medical experts should be conducting seminars/workshops on pre-eclampsia/eclampsia on regular basis for ladies and women in respective libraries in Nigeria so as to instil the knowledge of endemic disease like pre-eclampsia/eclampsia to them rather than waiting till when they get pregnant. Moreover, it is essential to include the ladies yet to get married to the knowledge as to get them prepared ahead of time and as such de-sued them from the concept that pre-eclampsia/eclampsia is for old women.

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