

Knowledge of Pregnancy Danger Signs among Pregnant Women Attending Antenatal Clinics in Nsukka Local Government Area, Enugu State

Cylia N. Iweama¹, Eyuche I. Ozoemena^{2*}, Benedeth A. Obayi³

^{1,2,3}Department of Human Kinetics and Health Education, University of Nigeria, Nsukka

*Corresponding Author

Dr. Eyuche I. Ozoemena

Department of Human Kinetics and Health Education, University of Nigeria, Nsukka

E-mail: eyuche.ozoemena@unn.edu.ng

Abstract

The purpose of this study was to determine the knowledge of pregnancy danger signs among pregnant women attending antenatal clinics in Nsukka Local Government Area (LGA), Enugu State. This study adopted descriptive survey research design. Specifically, three objectives with corresponding research questions and two hypotheses were formulated for the study. A multi-stage sampling technique was employed to select 360 pregnant women in Nsukka LGA. Data were collected through the researcher's designed questionnaire and analysed using frequency, percentage, and Chi-square statistics at .05 level of significance for research questions and hypotheses respectively. Results showed that pregnant women had very high (98.6%) knowledge of pregnancy danger signs. Pregnant women with tertiary education, secondary education, primary education and no formal education had very high level of knowledge of pregnancy danger signs. Pregnant women both in urban and rural areas had very high level of knowledge of pregnancy danger signs. The hypotheses tested statistical analysis indicated no significance difference in the level of knowledge of pregnancy danger signs among pregnant women based on level of education and location. Based on the findings, the study recommended recommended among others that the ministry of health in collaboration with other health professionals should adopts health educational strategies to improve the level of knowledge of pregnancy danger signs both in urban and rural areas and among educated and uneducated pregnant women.

Keywords: Knowledge, Pregnancy, Danger signs. Pregnant women

Introduction

Pregnancy is a normal process that results in a series of both physiological and psychological changes in expectant mothers. However, normal pregnancy may be accompanied with some problems and complications which is potentially life threatening to the mother and foetus (Tilahun, Bitewlegn, & Fekadu, 2018). According to World Health Organization (WHO, 2014) there was an estimated 289, 000 maternal deaths worldwide in year 2013, most of which may be considered preventable. Globally in 2017, approximately 810,000 women died every day from preventable causes related to pregnancy and childbirth (WHO, 2019). According to Tilahun, Bitewlegn, and Fekadu (2018) approximately 529,000



women die from pregnancy related causes annually and almost all (99%) of these maternal deaths occur in developing countries Nigeria inclusive.

The rate of maternal mortality in African countries is very high. According to World Health Organization in the record of 2017, 94 per cent of all maternal deaths occur in low and lower middle-income countries (WHO, 2019). Bakar, Mmbaga, Nielsen, and Manongi (2019) noted that insufficient knowledge about danger signs of pregnancy among women, families, and birth attendants in developing world is one of the major contributing factors for maternal deaths. Several studies in developing countries have reported a high burden of pregnancy complications as a critical issue in maternal and child health. According to Nurgi, Tachbele, Dibekulu and Wondim (2017), the national reproductive strategy of Ethiopia has given emphasis to maternal and newborn health so as to reduce the high maternal and neonatal mortality. The 2011 demographic health survey report of Tanzania showed that only 53 per cent of pregnant women were informed about the danger signs of pregnancy during their antenatal care visits and by 2018, only 26 per cent of the pregnant women in the rural community had the knowledge of pregnancy danger signs (Mwilike, Nalwadda, Kagawa, Malima, Mselle, & Horiuchi, 2018). Indian country also faces the challenge of limited knowledge of pregnancy danger signs. Only 25.92 per cent of pregnant women have adequate knowledge of danger signs during pregnancy (Punyatoya, 2018).

The state of maternal health in Nigeria demands a crucial careful attention. According to Agunw et al (2015) maternal mortality ratio in Nigeria is one of the highest in the West African sub-region and despite efforts which have been made to reduce it women are still dying from pregnancy related causes. Sufiyan et al; Adam, Umar, Ibrahim, Bashir and Birukila (2016), noted that maternal mortality rate in Nigeria is the second highest in the world (after India) and is estimated at 1100/100,000 live birth. This equates to 54,000 Nigerian women dying each year from pregnancy-related complications, which represents 10 per cent of global maternal mortality. Poor knowledge of pregnancy danger signs observed in northern part of Nigeria is very worrying as it endangers the life of the pregnant women and can ultimately lead to resultant increase in maternal and neonatal morbidity and mortality (Sufiyan et al.; 2016). According to Sageer, Kongnyuy and Sanni (2019), the majority causes and contributory factors to maternal and perinatal mortality in Southwest Nigeria are pregnancy related complications which could be prevented if there is adequate knowledge of pregnancy danger signs.

Enugu State, Southeast of Nigeria faces lots of challenges due to poor maternal health care. Inadequate knowledge of pregnancy danger signs, resulting in inability to recognize and probably react to the needs for accessing quality health care remains a major cause of preventable maternal deaths. Less than ten per cent (7.1%) of pregnant women have shown high level of knowledge of obstetric danger signs (Agunwa et al, 2015). According to Okeibunor, Onyeneho and Okonofua (2010) maternal mortality ratio is high in Enugu State, with figures ranging from 772 to 998 per 100,000 of which causes are more of pregnancy complicated cases. Enugu State Ministry of Health, in conjunction with some Non-Governmental Organizations, in attempt to reduce the maternal mortality in the state have emphasized the need of informing the populace of the various danger signs of pregnancy and urging the people for a collective action by ensuring that such women seek medical help immediately (Ossai & Uzochukwu, 2015). Some of these danger signs include vaginal bleeding before labour, reduced fetal movement, leakage fluid before labour, convulsion, severe headache, severe abdominal pain, blurring of vision, difficult breathing, among others.

The predominant cause of maternal morbidity and mortality in Nsukka LGA can be traceable to pregnancy complications. Pregnancy related complications have been shown to



be at high rate in Nsukka Zone of Enugu State due to high activities of childbearing in the area, which may be the accounted reason for high maternal mortality in Nsukka Local Government Area (Onah, 2009). According to Eke and Ogbu (2015), prevalence of maternal mortality in Nsukka LGA has been identified to have high association to pregnancy related complications. Therefore, adequate knowledge of pregnancy danger signs will be very necessary in reduction of maternal mortality.

Knowledge is the fact or condition of knowing something with familiarity gained through experience or association. Epetimehin and Ekundayo (2011) conceptualized knowledge as an invisible or intangible asset, in which its acquisition involves complex cognitive processes of perception, learning, communication, association and reasoning. The authors also asserted that one's exposure to proper health knowledge will positively influence the person's health attitude and practices. Therefore, knowledge is the key to optimum well-being. According to Gregg (2013), knowledge refers to awareness of or familiarity with various objects, events, ideas, or ways of doing things. Knowledge is a familiarity, awareness or understanding of someone or something such as fact, information, description or skills, which is acquired through experience or education by perceiving, discovering or learning (Haidler, 2017). Knowledge in this study is the awareness and understanding of pregnancy danger signs by pregnant women in Nsukka Local Government Area. It includes what the pregnant women know about danger signs during pregnancy.

Pregnant women experience physiological and psychological changes during pregnancy. Pregnant women are women undergoing gestational process, comprising the growth and development within them of new individual from conception through the embryonic and fetal periods to birth (Shaw, 2010). According to Lagadec, Steinecker and Ibanez (2018) pregnant women experience physical and emotional changes which can cause obstetric complications. Even in uncomplicated pregnancies, these changes can affect the quality of life of pregnant women and the foetus. In this study, pregnant women are women with a developing fetus. They are women between the periods of conception and delivery attending antenatal clinics in Nsukka Local Government Area. Tilahun, Bitewlegn, and Fekadu (2018) conceptualized pregnancy danger sign as the presence of condition that increases the chances of pregnant woman and/ or her unborn child dying or having poor health. According to Bakar, Mmbaga, Nielsen and Manongi (2019), the presence of danger signs during pregnancy indicates the need for immediate care to the woman and also a signal that something is wrong with the pregnant woman or the pregnancy itself.

Adequate and high knowledge of pregnancy danger signs is very paramount among pregnant women. Pregnant women ought to have adequate knowledge of pregnancy danger signs. They are expected to be well knowledgeable on signs that are abnormal and indicate suspected complications in pregnancy. High maternal morbidity and mortality rate in the study area could be closely linked to inadequate knowledge of pregnancy danger signs as few women seems to be aware of the signs that indicate an upcoming complications during pregnancy. If pregnant women are well informed, they will be properly equipped to make right decisions concerning their health and unborn child. Proper knowledge of pregnancy danger signs will assist pregnant women in Nsukka Local Government Area to seek obstetric care on time, thereby reducing the risk of complications during pregnancy as well as morbidity and mortality for mother and fetus in Nsukka Local Government Area, Enugu State.

Regrettably, many pregnant women seems to have inadequate knowledge of pregnancy danger signs, which could endanger the life of the mother and the fetus. These may cause related complications in pregnancy such as abortion, hyperemesis gravidarum, and preterm labour, infection in pregnancy, fetal distress, preeclampsia, placenta previa, placental



abruption, antepartum hemorrhage, and malposition of the fetus. Others are premature rupture of membranes, postpartum hemorrhage, preterm delivery, low birth weight infants, and increased need for cesarean deliveries and death of mother, fetus or both. It could also increase economic burden on both the mothers and the family members as such may result to hospitalization and loss of life.

Some studies have been conducted about pregnancy danger signs knowledge in many parts of Nigeria and Enugu State, but none of such studies to the best of the researcher's knowledge has been conducted to examine knowledge of pregnancy danger signs among pregnant women attending antenatal clinics in Nsukka Local Government Area, Enugu State; which is the basis for this study. On this regard, the researcher considered the study necessary.

Studies have identified some socio-demographic factors associated with level of knowledge of pregnancy danger signs among pregnant women. These factors include: level of education, location, maternal age, parity, economic status, occupation, availability and utilization of antenatal care services among others. This study only examined two variables: level of education and location.

Pregnant woman's level of education is likely to be equivalent to their level of knowledge. According to International Bureau of Education (2012), level of education is an ordered set of categories, intended to group educational programmes in relation to gradations of learning experiences and the knowledge, skills and competencies which each programme is designed to impact. According to Itamadan, Saeed, Kutbi, Choudry and Nooh (2010), educated adults were more likely to have knowledge of preventive methods of a disease than the uneducated adults. They noted that the higher the educational attainment, the higher the acquisition of knowledge and skills. Morhason-Bello et al (2016) stated that the level of education is proportional to level of knowledge as pregnant women who obtained higher education have more knowledge of pregnancy danger signs compared to those with primary education, secondary education, and non-formal education. According to Nurgi, Tachbele, Dibekulu and Wondim (2017), educational status of pregnant women was found to have a strong association with obstetric danger signs. In this study, level of education refers to the academic degree obtained by pregnant women in Nsukka Local Government Area. It is the extent of exposure of the pregnant women to formal education. Therefore, this study examined if level of education influence pregnancy danger signs or not.

Location is another socio-demographic factor that can influence pregnant woman's level of knowledge. Location as indicated by Igbokwe (2008) is an environmental factor which could be associated with the knowledge of childbearing mothers (CBMs) towards health programmes. Wulandari and Laksono (2020) in determinants of knowledge of pregnancy danger signs stated that urban women were more likely to have understanding of the pregnancy danger signs than rural women. This study investigated location as a variable.

Nsukka Local Government Area is one of the Local Government Areas (LGA) in Enugu State, Nigeria. Nsukka LGA shares boundaries with Igbo-Eze South LGA on the north, Udenu LGA on the north-east, Uzo-Uwani LGA on the south-west; Igbo-Etiti LGA on the south-east; and Odoru LGA on the west. There are clinics or hospitals or health facilities that offer antenatal care service in Nsukka Local Government Area. According to National Population Commission of Nigeria (2016), population census of Nsukka LGA as of 2016 was 417,700 of which 160,030 were females. The statistics showed that there was greater number of females within the childbearing age. Among the population in Nsukka Local Government Area, some are civil servants; as the renowned University of Nigeria and other government institutions are located in it; others are farmers and business men and women especially those



living in villages. Since greater number of females is within the reproductive age (15-49 years), it may express that there are pregnant women who experience pregnancy danger signs. Therefore, this study is important to examine if they have adequate knowledge of pregnancy danger signs in the study area.

Purpose of the Study

The purpose of this study was to investigate knowledge of pregnancy danger signs among pregnant women attending antenatal clinics in Nsukka Local Government Area, Enugu State, Nigeria. Specifically the study sought to ascertain the:

- 1. level of knowledge of pregnancy danger signs possessed by pregnant women in Nsukka Local Government Area (LGA), Enugu State;
- 2. level of knowledge of pregnancy danger signs possessed by pregnant women based on level of education in Nsukka LGA;
- 3. level of knowledge of pregnancy danger signs possessed by pregnant women based on location in Nsukka LGA.

Research Questions

The following research questions were formulated to guide the study:

- 1. What is the level of knowledge of pregnancy danger signs possessed by pregnant women in Nsukka Local Government Area?
- 2. What is the level of knowledge of pregnancy danger signs possessed by pregnant women based on level of education?
- 3. What is the level of knowledge of pregnancy danger signs possessed by pregnant women based on location?

Hypotheses

The following null hypotheses were postulated for the study and were tested at 0.05 level of significance:

- 1. There is no significant difference in the level of knowledge of pregnancy danger signs among pregnant women attending antenatal clinic in Nsukka Local Government Area, Enugu State based on level of education.
- 2. There is no significant difference in the level of knowledge of pregnancy danger signs among pregnant women attending antenatal clinic in Nsukka Local Government Area, Enugu State based on location.

Methods

To achieve the objectives of the present study, descriptive survey research design was employed. McCombes (2019) stated that descriptive survey research design is an appropriate choice when the research aim is to identify characteristics, frequencies, trends and categories; also allows the researcher to gather large volumes of data from a large population. It was successfully used by Abosede, Fasola and Fasola (2018) in a survey to determine the knowledge, attitude and practice of pregnancy danger signs among women of childbearing age in Shomolu Local Government, Lagos State, Nigeria. The design is therefore considered



appropriate for use in the present study as it will give current information on the knowledge of pregnancy danger signs among pregnant women attending antenatal clinics in Nsukka Local Government Area, Enugu State, Nigeria.

The population for this study consisted of all registered pregnant women attending antenatal clinics in different health facilities in Nsukka Local Government Area. The population from January to May, 2021 was 3,291 pregnant women (Office of Monitoring and Evaluation Unit, Health Department Nsukka Local Government Area).

A sample size of three hundred and sixty (360) pregnant women attending antenatal clinics in Nsukka LGA was used. The sample size was based on Cohen, Manion and Morrison (2011), which states that when the population size is 2,500 and above at 95 per cent confidence level, the sample size should be 333 and above. A multi-stage sampling procedure was employed to draw out the sample for the study. In the first stage, stratified random sampling was used to stratify the health facilities into urban and rural health facilities. The second stage involved the use of simple random sampling techniques of balloting without replacement to draw four health facilities each from urban and rural health facilities making it eight health facilities. In the third stage, a convenient sampling technique of balloting without replacement was used to select 45 pregnant women from each of the selected health facilities making it three hundred and sixty (360) pregnant women who were used for the study. The instrument for data collection was a researcher designed questionnaire called Knowledge of Pregnancy Danger Signs Questionnaire (KPDSQ). The face and content validity of the research instrument was established by the judgments of three experts from the Department of Human Kinetics and Health Education, University of Nigeria, Nsukka. Split-half method was used to establish the reliability of the instrument. Twenty (20) copies of Knowledge of Pregnancy Danger Signs Questionnaire (KPDSQ) were administered to pregnant women attending antenatal clinics in Igbo-Eze South LGA. Spearman Rank-Order Correlation was used to calculate the reliability of the instrument. The correlation co-efficient index obtained was 0.70. Glen (2016) stated that if a reliability test obtains a correlation co-efficient index of 0.60 and above, the instrument is considered reliable, therefore, KPDSQ was considered reliable for the study. Copies of the instrument were administered to the respondents in each antenatal clinic by the researcher, four research assistants and some nurses on duty in each facility. Copies of the instrument after completion of responses by the respondents was collected by the researcher and her assistants on the spot.

Copies of the questionnaire returned were properly crosschecked for completeness of responses. Out of the three hundred and sixty (360), fifteen (15) questionnaire were discarded due to incompleteness of information. The remaining three hundred and forty-five (345) copies were used for analysis. The information from copies of the questionnaire was coded and analyzed using the Statistical Packages for Social Sciences, IBM-SPSS (version 22 statistics for window). Frequencies and percentages were used to answer the research questions. Ashu1977 modified version by Okafor 1997 criteria for determining knowledge was used. Scores below 20 percent were considered very low level of knowledge, 20-39 percent was considered low level of knowledge, 40-59 percent was considered average level, 60-80 percent was considered high level while above 80 percent was considered very high level of knowledge. Chi-square statistics was used in testing the hypotheses at .05 level of significance.

Results

Table 1:Level of Knowledge of Pregnancy Danger Signs (KPDS) among Pregnant Women (PW) (n=345)



		Yes		No	
S/n	Items	f	%	f	%
1	Pregnancy danger signs are indicators of pregnancy complications	33 5	97.1	10	2.9
2	Vaginal bleeding before delivery time is a pregnancy danger sign	32 5	94.2	20	5.8
3	Reduced fetal movement is a pregnancy danger sign	28 5	82.6	60	17.4
4	Leakage of fluid before delivery time is pregnancy danger sign	29 4	85.2	51	14.8
5	Convulsion is a pregnancy danger sign	30 3	87.8	42	12.2
6	Pregnancy danger signs can occur at any stage of pregnancy	33 2	96.2	13	3.8
7	Severe headache and high fever are pregnancy danger signs	29 1	84.3	54	15.7
8	Severe abdominal pain is a pregnancy danger sign	29 5	85.5	50	14.5
9	Pregnancy danger signs can be experienced by any pregnant woman	31 2	90.4	33	9.6
10	Early report of danger sign to obstetric care can prevent complications	33 4	96.8	11	3.2
	Average %	•	98.6		1.4

Key: Below $20\% = very \ low$, 21 - 39% = low, 40 - 59% = average, 60 - 80% = high, $81 - 100\% = very \ high$

Results in Table 1 showed that pregnant women attending antenatal clinics in Nsukka LGA had very high level of knowledge (98.6%) of pregnancy danger signs.

Table 2: Level of Knowledge of Pregnancy Danger Signs by PW Based on Level of Education

	Level of education	n							
	No formal		Primary		mary	Secondar		Tertiary	
		educatio educatio n n $(n = 2)$ $(n = 3)$		y educatio n (n = 138)		Educ n (n =			
S/	Items	f	%	f	%	f	%	f	%
n									
1	Pregnancy danger signs are indicators of pregnancy complications	2	100	3	100	13 2	94. 7	198	59. 1
2	Vaginal bleeding before delivery time is a pregnancy danger sign	2	100	3	100	12 6	91. 3	194	96. 0



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3	Reduced fetal movement is a pregnancy danger sign	2	100	2	66.7	11 7	84. 8	164	81. 2
4	Leakage of fluid before delivery time is		100						
	pregnancy danger sign	2	100	2	66.7	11 4	82. 6	176	87. 1
5	Convulsion is a pregnancy danger sign	2	100	2	66.7	12 0	87. 0	179	88. 6
6	Pregnancy danger signs can occur at any		100		100			100	
	stage of pregnancy	2	100	3	100	12 8	92. 8	199	98. 5
7	Severe headache and high fever are pregnancy danger signs	2	100	3	100	11	84.	169	83.
		2	100	3	100	7	8	109	7
8	Severe abdominal pain is a pregnancy danger sign	2	100	2	66.7	11	84.	175	86.
		_	100	-	00.7	6	1	175	6
9	Pregnancy danger signs can be experienced by any pregnant woman	2	100	3	100	13	94.	176	87.
10	• • • • •					1	9		1
10	Early report of danger sign to obstetric care can prevent complications	2	100	3	100	13	94.	199	98.
			100		0.4	0	2		5
	Average %		100		86.7		89. 1		86. 6

Key: Below 20% = very low, 21 – 39% = low, 40 -59% = average, 60 -80% = high, 81 – 100% = very high

Results in Table 2 showed that overall, pregnant women attending antenatal clinics in Nsukka LGA with no formal education (100%), primary education (86.7%), secondary education (89.1%) and tertiary education (86.6%) had very high level of knowledge of pregnancy danger signs based on their levels of education.

Table 3: Level of Knowledge of Pregnancy Danger Signs by PW Based on Location (n=345)

			ation	ion		
		Urba	ın	Rura	ıl	
		$(\mathbf{n} = 1)$	232)	(n = 1)	113)	
S/n	Items	f	%	f	<u>%</u>	
1	Pregnancy danger signs are indicators of pregnancy complications	223	96.1	112	99.1	
2	Vaginal bleeding before delivery time is a pregnancy danger sign	216	93.1	109	96.5	
3	Reduced fetal movement is a pregnancy danger sign	193	83.2	92	81.4	
4	Leakage of fluid before delivery time is pregnancy danger sign	202	87.1	92	81.4	
5	Convulsion is a pregnancy danger sign	201	86.6	102	90.3	
6	Pregnancy danger signs can occur at any stage of	222	95.7	110	97.3	



				TOH (HEMAN)	STEEL
	pregnancy				
7	Severe headache and high fever are pregnancy danger signs	193	83.2	98	86.7
8	Severe abdominal pain is a pregnancy danger sign	196	84.5	99	87.6
9	Pregnancy danger signs can be experienced by any pregnant woman	204	87.9	108	95.6
10	Early report of danger sign to obstetric care an prevent complication	224	96.6	110	97.3
	Average %		89.4		91.3

Key: Below 20% = very low, 21 - 39% = low, 40 - 59% = average, 60 - 80% = high, 81 - 100% = very high

Results in Table 3 showed that overall, pregnant women attending antennal clinics in urban area (89.4%) and rural area (91.3%) in Nsukka LGA had very high level of knowledge of pregnancy danger signs.

Table 4: Chi-Square Test of No Significance Difference on Knowledge of Pregnancy Danger Signs among PW based on Level of Education (n = 345)

S/n	Variable	Yes	No	χ^2	df	P-value	Decision
	(Level of education)	O(E)	O(E)				
1	No formal education	2(2.0)	0(0)				
2	Primary education	3(3.0)	0(0)				
3	Secondary education	136(136.0)	2(2.0)	.075	3	.995	Not rejected
4	Tertiary education	199(199.1)	3(2.9)				

The P-value is significant at .05 level; O (E) = Observation frequency (Expected frequency)

Results in Table 4 showed the Chi-square value with the corresponding p-value of no significance difference in the level of knowledge of pregnancy danger signs among pregnant women attending antenatal clinics in Nsukka Local Government Area based on level of education ($\chi^2 = .075$, P = .995 > .05). Since the P-value was greater than .05 level of significance, the null hypothesis was therefore not rejected. This implies that there is no significance difference in the level of knowledge of pregnancy danger signs possessed by pregnant women in Nsukka LGA based on level of education.

Table 5: Chi-Square Test of No Significance Difference on Knowledge of Pregnancy Danger Signs among PW based on Location (n = 345)

S/n	Variable (Location)	Yes O(E)	No O(E)	χ^2	df	P-value	Decision
1	Urban	227(228.6)	5(3.4)	2.471	1	.116	Not rejected
2	Rural	113(111.4)	0(1.6)				

The P-value is significant at .05 level; O(E) = Observation frequency(Expected frequency)



Results in Table 5 showed the Chi-square value with the corresponding p-value of no significance difference in the level of knowledge of pregnancy danger signs among pregnant women attending antenatal clinics in Nsukka LGA based on location ($\chi^2 = 2.471$, p = .116, > .05). Since the p-value was greater than the .05 level of significance, the null hypothesis was not rejected. This implies that there is no significance difference in the level of knowledge of pregnancy danger signs possessed by pregnant women attending antenatal clinics in Nsukka LGA based on location.

Discussion

The study generated information on knowledge and attitude towards pregnancy danger signs among pregnant women attending antenatal clinics in Nsukka LGA. The findings of the study are discussed below.

Findings in Table 1 showed that overall, pregnant women attending antenatal clinics in Nsukka LGA possessed very high level (98.6%) of knowledge of pregnancy danger signs. The findings were not surprising. This is because the nurses and midwives in the antenatal clinics might have been conducting health-talks during antenatal services; during which pregnant women are exposed to the danger signs in pregnancy. The findings are in line with Morhason-Bello et al (2016) which revealed that more than half (56.3%) of the pregnant women had a very good knowledge of danger signs in pregnancy. The findings were also in line with Rabiu and Ladu (2019) which stated that more than two-third (77.1%) of pregnant women was knowledgeable of pregnancy danger signs.

Findings in Table 2 showed that overall, pregnant women attending antenatal clinics in Nsukka LGA with no formal education (100%), primary education (86.7%), secondary education (89.1%) and tertiary education (86.6%) had very high level of knowledge of pregnancy danger signs based on their level of education. The corresponding hypothesis in Table 7 showed no significance difference in the level of knowledge of pregnancy danger signs possessed by pregnant women based on level of education. The findings were surprising because pregnant women with higher level of education ought to have higher level of knowledge. The findings agree with Mwilike (2013) who found that level of education ought to have higher level of statistically significant with the level of knowledge of pregnancy danger significant with Wassihun, Negese and Hussen (2020) who found knowledge of pregnancy danger signs was significantly associated with educational status of the pregnant women.

Findings in Table 3 showed that overall, pregnant women attending antennal clinics in urban area (89.4%) and rural area (91.3%) in Nsukka LGA had very high level of knowledge of pregnancy danger signs. The corresponding hypothesis showed no significance difference in the level of knowledge of pregnancy danger signs possessed by pregnant women based on location (Table 8). The findings were surprising because pregnant women attending antenatal clinics in urban area are likely to have access to quality obstetric care services more than those in rural area. The findings disagree with Ketema, Neli, Nesredin and Nina (2018) who revealed that pregnant women in rural area had high level of knowledge of pregnancy danger signs than the pregnant women in urban area. The findings also disagree with Woldeamanuel, Lemma and Zegeye (2019) who revealed that urban residence have a significant association with being knowledgeable about obstetric danger signs.

Conclusions



The findings have shown that level of knowledge of pregnancy danger signs among PW was very high. Level of knowledge of pregnancy danger signs for PW with no formal education, primary education, secondary education and tertiary education was very high. Level of knowledge of pregnancy danger signs for PW in urban and rural area was very high. There was no significance difference in the level of knowledge of pregnancy danger signs among pregnant women attending antenatal clinics in Nsukka LGA based on level of education and location.

Recommendation

The ministry of health in conjunction with health educators should organize seminars and workshops in health facilities and communities to improve the level of knowledge of PW on pregnancy danger signs since some PW with different level of education both in urban and rural area do not have sound knowledge of pregnancy danger signs..

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