PERCEIVED HEALTH BENEFITS OF EXERCISE ON PREGNANT WOMEN IN NSUKKA LGA, ENUGU STATE BASED ON SELECTED DEMOGRAPHICS

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Abstract

The study investigated the perceived health benefits of exercise among pregnant women in, Nsukka Local Government Area based on selected demographics.The cross-sectional survey research design was used for the study. Four research questions and four null hypotheses guided the study. The population of 3291 pregnant women in Nsukka LGA and a sample of 360 subjects were selected for the study. Structured questionnaire was used for data collection. The research questions were answered using frequency and percentages while the null hypotheses were tested using Chi-square ($\chi 2$) statistical at 0.05 level of significance.The perception of exercise benefit was higher among pregnant women within the age range of 32-above years, pregnant women whose level of education is secondary and primary school, pregnant women who are traders/artisans and pregnant women in the urban area. The perceived health benefit of exercise in relation to age, education, occupation and location were not significant ($p > 0.05$). Conclusions: Based on these findings, it was concluded among other things that there is a high perception of health benefits of exercise among pregnant women in Nsukka LGA of Enugu State.

Keywords: Exercise, Pregnancy, Pregnant Woman Health, Perceived Benefits

Introduction

Exercise is a fundamental component of antenatal care. Several positive associations between regular activity and maternal outcomes have been clearly demonstrated. An active pregnancy has shown an improvement in cardiovascular and metabolic function, and increased bone density (Prather, Spitznagle & Hunt, 2012). However, women's physical activity lessens asthe perception of risk in pregnancy is high (Motolla & Mclaughlin, 2011). World Health Organization (2016) stated that the fourth leading risk factor for early mortality worldwide is physical inactivity. Universally pregnancy being an important phase in the life of women has been found from studies to be a risk factor associated with decreased physical activity. According to the data presented by Evenson in (Justyna, Dorota & El˙zbiete, 2018) only (15.8%) of pregnant women in the USA reported being active, in accordance with the recommendations. The proportion of pregnant women with overweight or obesity is increasing rapidly across the world. The prevalence of an insufficient level of physical activity or exercise in pregnant women has been demonstrated in a study conducted by (Santo, Forbes, Oken, & Belfort, 2017) which stated that merely (9%) of 1584 pregnant women met the American College of Obstetrics and Gynaecology ACOG guidelines, across the world and Africa inclusive.

In Africa, there are still some conservative views and myths that exercises are delicate and unsafe for pregnant women. Women are also afraid to participate in physical exercise owing to fear that it will negatively impact on their health. And research has proven that pregnancy leads to more sedentary lifestyle due to physiological changes that goes on during this period (Adeoye, 2022 and Fazzi, Saunders,Linton,Norman,and Reynolds, 2017). In Nigeria, some researchers have conducted a study on the concept of exercise during pregnancy. Eziaha (2018) affirmed that the major reason working out is not exactly encouraged by most pregnant women because they do not understand why, most pregnant women erroneously think that exercise during pregnancy predispose the mother and child to injury. A survey conducted to assess physical activity and energy expenditure in Ibadan pregnant women, about half [222(49.0%)], of the participants were classified as sedentary based on their performance on the Pregnancy Physical Activity Questionnaire (Adeniyi, Ogwumike, & Osinike, 2014). The result showed the negative impact sedentary living has on the health of the women.

Despite the well-documented health benefits of involvement in physical activity or exercise in this period of life. Huberty (2016) stated that the period of pregnancy continues to be one of the causes of a substantial reduction in exercise.

Exercise is defined as a planned, structured, and repetitive subset of physical activity that improves or maintains physical fitness, overall health or well-being as an intended intermediate or final objective (World Confederation for Physical Therapy, 2011).In the absence of medical or obstetrical complications, pregnant women are encouraged to continue and maintain active lifestyles during their pregnancies. The importance of exercise in pregnancy can go a long way in save guarding the health of both the mother and child. Regular antenatal exercise is highly recommended for its overall health benefits on the mother and the fetus (Sujindra, E., Bupathy, A., Suganya, A., & Praveena, P., 2015). It is recognized as a safe practice, indicated for healthy pregnant women as long as the intensity, duration, frequency of the exercises is tailored to the requirement of each woman (Mbada et al., 2015). prevention of gestational weight gains and glucose intolerance (Chasen-Taber, 2012; Mottala & Ruchat, 2011).There is ample and consistent evidence that promoting physical activity in women of reproductive age may be a promising approach for the prevention of excessive weight gain, gestational diabetes mellitus and subsequent complications suffered by children born from pregnancies affected by gestational diabetes mellitus (Samselle, 2012)).

Regrettably, most women quit exercising and adopts a sedentary lifestyle after discovering they are pregnant. There are number of reasons for this including the perception that exercise may put their baby at risk and be damaging to a healthy pregnancy. This may cause them to become overweight which has tendencies to increase risk of complications in pregnancy and during labour among many pregnant women. Some of these complications among pregnant women include Musculoskeletal discomfort such as lower back, pelvic and joint pain, depression, pre-eclampsia, gestational diabetics, spontaneous abortion, dyspnoea and hypertension.

Studies have been conducted in other areas on the perceived benefits of exercise among pregnant women. However, there seems to be dearth of research on the perceived benefits of exercise among pregnant women in Nsukka L.G.A. Therefore, the purpose of the study was to investigate the perceived health benefits of exercise among pregnant women in Nsukka Local Government Area, Enugu.

The following Research questions were posed to guide the study:

- What is the perceived health benefit of exercise among pregnant women in Nsukka LGA, Enugu State; based on age?
- What is the perceived health benefit of exercise among pregnant women in Nsukka LGA, Enugu State; based on level of education?
- What is the perceived health benefit of exercise among pregnant women in Nsukka LGA, Enugu State; based on occupation?
- What is the perceived health benefit of exercise among pregnant women in Nsukka LGA, Enugu State; based on location?

Research Design

The research design adopted for this study is the cross-sectional survey research design. A cross-sectional survey is one that produces a snap shot of a population at a particular point in time. Instead of following a group of subjects over a period of time, cross-section of the subjects of varying ages and other socio-demographic factors are sampled and studied at the same time, and data are obtained at one time from groups or at different stages of development (Cohen, Manion, & Morrison, 2011).

Area of the Study

This study was carried out in Nsukka LGA of Enugu State. Nsukka is a local government area in the southeast Nigeria. It is situated in the northern part of Enugu state. It is one of the seventeen (17) LGAs of Enugu State. Nsukka Local Government Area shares boundaries with Igbo-Etiti LGA on the south, Uzo-Uwani LGA on the West, Udenu LGA on the East and Igbo-Eze LGA on the North. Nsukka LGA is divided into four parts namely: Nsukka East, Nsukka West, Nsukka South and Nsukka central and has its headquarters at Nsukka town (Ofomata, 2011). The LGA comprises mainly of Igbo ethnic nationality. The inhabitants of the area are mainly farmers, palm wine tappers, traders, and civil servants among who are teachers. Nsukka LGA is surrounded by large markets of different sizes, financial institutions, hospitals, police stations, schools of all types and dwellers from different parts of the country.

Population of the Study

The population for the study consists of total population of three thousand, two hundred and ninety-one (3291) pregnant women attending antenatal care services in Nsukka Local Government Area, Nsukka LGA Health office, 2021. (See Appendix B page 42)
Exclusion Criteria: Pregnant women with medical conditions requiring bed rest or confinement, as directed by their physicians were excluded from the study.

Sample and Sampling Technique

The sample for this study comprised of 360 pregnant women in Nsukka L.G.A of Enugu state. The sample size will be drawn using multi-stage sampling technique. This is in line with the guideline of Cohen, Manion, and Morrison (2011), that when a population size is 2500 and above at 95 percent confidence level (5% interval), the population size should be 333 and above. Multi –stage sampling procedure was used to draw out the sample size for the study. Stage one involved using stratified sampling to divide the communities in Nsukka Local Government area into 4 development centers: Nsukka Central, Nsukka East and Nsukka West and Nsukka South. Stage two involved the use of simple random sampling to select two health facilities each from the four development centers to give a total number of eight health facilities. Stage three involved conveniently sampling 45 pregnant women who attend antenatal care service at each health facility. This will give a total of 360 pregnant women who will be used for this study.

Instrument for Data Collection

Self-administered questionnaires were used to obtain data from consenting respondents. The instrument for data collection was a structured 'Perceived Health Benefits of Exercise Questionnaire (PHBEQ), comprising of 24 items. The PHBEQ was divided into two sections: A & B. Section A contains four items on demographic characteristics of the respondents, such as: age, occupation and level of education and location while section B contains 20 items on the Perceived Health Benefits of Exercise among Pregnant Women. Section B will be assigned response options of Yes and No. The respondents will be requested to place a tick (√) against the option (s) that best applied to them.

Validity and reliability of the instrument

The face validity of the instrument 'PHBEQ' was established by five experts. Four was from the Department of Human Kinetics and Health Education, and one from the Department of Science Education (Measurement and Evaluation), all from University of Nigeria, Nsukka. Each of these experts was given a draft of the PHBEQ, accompanied with the purpose of the study and its specific objectives, research questions, and hypotheses. The reliability of the instrument was established by carrying out a trial-test on twenty pregnant women in Udenu LGA of Enugu State. Udenu, which is a neighboring local government and has peculiar features with Nsukka LGA. The internal consistency for PBEQ was computed using alpha (Kuder-Richardson [K-R21]) statistics. Based on this, a reliability coefficient of .761 was obtained, and was considered very reliable for the present study.

Method of Data Analysis

The 352 returned copies of PHBEQ were properly filled out and used for data analysis. Information from the instruments will be coded into IBM Statistical Package for Social Sciences (SPSS) version 23, and analyzed to indicate the response frequencies, percentages and probability values. The research questions were answered using frequency and percentages while the null hypotheses were tested using Chi-square ($\chi 2$) statistical at 0.05 level of significance. To ascertain the perceived health benefits of exercise among pregnant women in Nsukka Local Government Area of Enugu State.

Research Results

Table 1: Percentage Analysis of the Perceived Health Benefits of Exercise among Pregnant Women in Nsukka Local Government Area, Enugu Based on Age (n= 352)

S/n	Item Statement	18-22years		23-27years		28-32years		32 and above	
		Yes		Yes		Yes		Yes	
		f	%	f	%	f	%	f	%
1	Exercising improves the functioning of my cardiovascular system	17	77.3	99	79.2	99	78.6	59	74.7
2	I have improved feelings of wellbeing from exercise	16	72.7	104	83.2	112	88.9	70	88.6
3	Exercise increases my physical endurance	14	63.6	107	85.6	110	87.3	67	84.8
4.	Exercise help me decrease fatigue	15	68.2	69	55.2	85	67.5	53	67.1
5	Exercise improves my mood	14	63.6	100	80.0	103	81.7	60	75.9
6	Exercising help me sleep better at night	14	63.6	109	87.2	102	81.0	69	87.3
7	Exercising helps me reduce stress	8	36.4	75	80.0	81	64.3	65	82.3
8	I have improved feeling of wellness from exercise	14	63.6	110	88.0	115	91.3	71	89.9
9	Exercise gives me better body shape	18	81.8	119	95.2	120	95.2	71	89.9
10.	Exercising helps to prevent excessive weight gain	21	95.5	112	89.6	113	89.7	71	89.9
11	Exercise improves my flexibility	17	77.3	92	73.6	88	69.8	66	83.5
12	After exercising I experience lower incidence of back pain, constipation, swelling	12	54.5	83	66.4	101	80.2	66	83.5
13	Exercising reduces risk of delivery through Caesarean Section	17	77.3	92	73.6	89	70.6	49	62.0
14	Exercising will keep me from having hypertension during pregnancy	15	68.2	100	80.0	94	74.6	67	84.8
15	I like antenatal exercise because it improves easy delivery during labour	16	72.7	117	93.6	119	94.4	75	94.9
16	Exercising help me control gestational diabetes mellitus	8	36.4	94	75.2	103	81.7	66	83.5
17	I do not like antenatal exercises because of its complications to pregnancy	14	63.6	42	33.6	58	46.0	44	55.7
18	I relate more with people after exercising	13	59.1	101	80.8	95	75.4	62	78.5
19	Exercising is a good way for me to meet new people	20	90.9	109	87.2	107	84.9	65	82.3
20	Exercising helps me manage mood swings	22	100.0	99	79.2	105	83.3	73	92.4
	Overall Value	**22**	**81.6**	**125**	**87.4**	**126**	**95.0**	**79**	**97.3**

Table 1 shows that the perceived health benefits of exercise among pregnant women in Nsukka Local Government Area is higher among pregnant women within the age range of 32- above years (97.3%) and 28-32 years (95.0%) while pregnant women within the ages of 23-27years (87.4%)and 18-22(81.6%) is slightly lower. The table further shows that women who perceive that exercise helps them to manage mood swing has (100.0%) response among pregnant women from 18-22years while women who perceive that exercising helps them to reduce stress (36.4%) and control gestational diabetes mellitus (36.4%) is the lowest within the same age range.

Table 2: Percentage Analysis of the Perceived Health Benefits of Exercise among Pregnant Women in Nsukka Local Government Area, Enugu Based on level of education (n= 352)

S/N	Item Statement	NFE		PSE		SSE		TLE	
		Yes		Yes		Yes		Yes	
		f	%	f	%	f	%	f	%
1	Exercising improves the functioning of my cardiovascular system	0	0.0	8	80.0	110	64.7	156	91.8
2	I have improved feelings of wellbeing from exercise	0	0.0	10	100.0	134	78.8	158	92.9
3	Exercise increases my physical endurance	0	0.0	10	100.0	134	78.8	154	90.6
4.	Exercise help me decrease fatigue	0	0.0	6	60.0	98	57.6	118	69.4
5	Exercise improves my mood	1	50.0	10	100.0	133	78.2	133	78.2
6	Exercising help me sleep better at night	0	0.0	6	60.0	136	80.0	152	89.4
7	Exercising helps me reduce stress	1	50.0	7	100.0	109	64.1	112	65.9
8	I have improved feeling of wellness from	0	0.0	10	100.0	138	81.2	162	95.3

	exercise								
9	Exercise gives me better body shape	1	50.0	10	100.0	156	91.8	161	94.7
10.	Exercising helps to prevent excessive weight gain	0	0.0	9	90	154	90.6	154	90.6
11	Exercise improves my flexibility	1	50.0	9	90	124	72.9	129	75.9
12	After exercising I experience lower incidence of back pain, constipation, swelling	1	50.0	10	100.0	118	69.4	133	78.2
13	Exercising reduces risk of delivery through Caesarean Section	1	50.0	5	50.0	120	70.6	121	71.2
14	Exercising will keep me from having hypertension during pregnancy	1	50.0	6	60.0	127	74.7	142	83.5
15	I like antenatal exercise because it improves easy delivery during labour	0	0.0	10	100.0	159	93.5	158	92.9
16	Exercising help me control gestational diabetes mellitus	0	0.0	8	80.0	126	74.1	137	80.6
17	I do not like antenatal exercises because of its complications to pregnancy	1	50.0	4	40.0	91	53.5	62	36.5
18	I relate more with people after exercising	1	50.0	10	100.0	128	75.3	132	77.6
19	Exercising is a good way for me to meet new people	0	0.0	10	100.0	140	82.4	151	88.8
20	Exercising helps me manage mood swings	0	0.0	10	100.0	142	83.5	147	85.5
	Overall Value	**0**	**0.0**	**10**	**100.0**	**170**	**100.0**	**169**	**99.4**

Table 2 shows that the perceived health benefits of exercise among pregnant women in Nsukka Local Government Area is higher among pregnant women whose level of education is Secondary and primary level of education (100%) while pregnant women who is at tertiary level of education is slightly lower (99.4%) is slightly lower. The table further shows more perceived health benefit (100.0%) response among pregnant women whose level of education is Primary school education while women who did not attend any formal education has the lowest (0.0%)

Table 3
Percentage Analysis of the Perceived Health Benefits of Exercise among Pregnant Women in Nsukka Local Government Area, Enugu Based on occupation (n= 352)

S/N	Item Statement	Student		Trading		Civil service	
		Yes	No	Yes	No	Yes	No
		f(%)	f(%)	f(%)	f(%)	f(%)	f(%)
1	Exercising improves the functioning of my cardiovascular system	89(90.8)	9(9.2)	103(66.5)	52(33.5)	82(82.8)	17(17.2)
2	I have improved feelings of wellbeing from exercise	83(84.7)	15(15.3)	126(81.3)	29(18.7)	93(93.9)	6(6.1)
3	Exercise increases my physical endurance	83(84.7)	15(15.5)	127(81.9)	28(18.1)	88(88.9)	11(11.1)
4.	Exercise help me decrease fatigue	58(59.2)	40(40.8)	89(57.4)	66(42.6)	75(75.8)	24(24.2)
5	Exercise improves my mood	79(80.6)	19(19.4)	125(80.6)	30(19.4)	73(73.7)	26(26.3)
6	Exercising help me sleep better at night	78(79.6)	20(20.4)	131(84.5)	24(15.5)	85(85.9)	14(14.1)
7	Exercising helps me reduce stress	54(55.1)	44(44.9)	100(64.5)	55(35.5)	75(75.8)	24(24.2)
8	I have improved feeling of wellness from exercise	83(84.7)	15(15.3)	137(88.4)	18(11.6)	90(90.9)	9(9.1)
9	Exercise gives me better body shape	94(95.9)	4(4.1)	143(92.3)	12(7.7)	91(91.9)	8(8.1)
10.	Exercising helps to prevent excessive weight gain	88(89.8)	10(10.2)	146(94.2)	9(5.8)	83(83.8)	16(16.2)
11	Exercise improves my flexibility	65(66.3)	33(33.7)	118(76.1)	37(23.9)	80(80.8)	19(19.2)
12	After exercising I experience lower incidence of back pain, constipation, swelling	62(63.3)	36(36.7)	116(74.8)	39(25.2)	84(84.8)	15(15.2)
13	Exercising reduces risk of delivery through Caesarean Section	77(78.6)	21(21.4)	102(65.8)	53(34.2)	68(68.7)	31(31.3)
14	Exercising will keep me from having hypertension during pregnancy	77(78.8)	21(21.4)	118(76.1)	37(23.9)	81(81.8)	18(18.2)
15	I like antenatal exercise because it improves easy delivery during labour	84(85.7)	14(14.3)	151(97.4)	4(2.6)	92(92.9)	7(7.1)

16	Exercising help me control gestational diabetes mellitus	65(66.3)	33(33.7)	129(83.2)	26(16.8)	77(77.8)	22(22.2)
17	I do not like antenatal exercises because of its complications to pregnancy	36(36.7)	62(63.3)	75(48.4)	80(51.6)	47(47.5)	52(52.5)
18	I relate more with people after exercising	66(67.3)	32(32.7)	121(78.1)	34(21.9)	84(84.8)	15(15.2)
19	Exercising is a good way for me to meet new people	84(85.7)	14(14.3)	130(83.9)	25(16.1)	87(87.9)	12(12.1)
20	Exercising helps me manage mood swings	80(81.6)	18(18.4)	134(86.5)	21(13.5)	85(85.9)	14(14.1)
	Overall Value	**97(99.0)**	**1(1.0)**	**154(99.4)**	**1(0.6)**	**98(99.0)**	**1(1.0)**

Table 3 shows that the perceived health benefits of exercise among pregnant women in Nsukka Local Government Area is higher among women who are traders/Artisans (99.4%) while that of pregnant women who are civil servants and students is slightly lower (99.0%). The table further shows that women who like antenatal exercise because it improves easy delivery during labour has (97.4%) response among women who are traders/artisans while women who do not like antenatal exercises because of its complications to pregnancy is the lowest (47.5%) within women who are civil servants.

Table 4: Percentage Analysis of the Perceived Health Benefits of Exercise among Pregnant Women in Nsukka Local Government Area, Enugu Based on location (n= 352)

S/N	Item statement	Rural				Urban			
		Yes		No		Yes		No	
		f	%	f	%	f	%	f	%
1	Exercising improves the functioning of my cardiovascular system	108	65.5	57	34.5	166	88.8	21	11.2
2	I have improved feelings of wellbeing from exercise	140	84.8	25	15.2	162	86.6	25	13.4
3	Exercise increases my physical endurance	132	80.0	33	20.0	166	88.8	21	11.2
4.	Exercise help me decrease fatigue	90	54.5	75	45.5	132	70.6	55	29.4
5	Exercise improves my mood	125	75.8	40	24.2	152	81.3	35	18.7
6	Exercising help me sleep better at night	137	83.0	28	17.0	157	84.0	30	16.0
7	Exercising helps me reduce stress	89	53.9	76	46.1	140	74.9	47	25.1
8	I have improved feeling of wellness from exercise	136	82.4	29	17.6	174	93.0	13	7.0
9	Exercise gives me better body shape	143	86.7	22	13.3	185	98.9	2	1.1
10.	Exercising helps to prevent excessive weight gain	144	87.3	21	12.7	173	92.5	14	7.5
11	Exercise improves my flexibility	115	69.7	50	30.3	148	79.1	39	20.9
12	After exercising I experience lower incidence of back pain, constipation, swelling	112	67.9	53	32.1	150	80.2	37	19.8
13	Exercising reduces risk of delivery through Caesarean Section	105	63.6	60	36.4	142	75.9	45	24.1
14	Exercising will keep me from having hypertension during pregnancy	128	77.6	37	22.4	148	79.1	39	20.9
15	I like antenatal exercise because it improves easy delivery during labour	149	90.3	16	9.7	178	95.2	9	4.8
16	Exercising help me control gestational diabetes mellitus	127	77.0	38	23.0	144	77.0	43	23.0
17	I do not like antenatal exercises because of its complications to pregnancy	88	53.3	77	46.7	70	37.4	117	62.6
18	I relate more with people after exercising	121	73.3	44	26.7	150	80.2	37	19.8
19	Exercising is a good way for me to meet new people	134	81.2	31	18.8	167	89.3	20	10.7
20	Exercising helps me manage mood swings	137	83.0	28	17.0	162	86.6	25	13.4
	Overall Value	**163**	**98.8**	**2**	**1.2**	**186**	**99.5**	**1**	**0.5**

Table 4 shows that the health benefits of exercise among pregnant women in Urban area is higher (99.5%) compared to the pregnant women in the rural area (98.8%). Although the perceived health benefit of exercise among pregnant women in these two locations is high. The table further reveals that women who engage in antenatal exercise because it gives them better body shape is high among pregnant women in the urban area (98.9%). The table also shows that pregnant women who engage in exercise because it improves easy delivery during labour is the highest among women in the rural area (90.3%) while women who do not engage in exercise due to complications associated with it (37.4%) is the lowest among pregnant women in the urban area.

Null Hypothesis

1. The null hypothesis which states that there is no significant difference in the perceived health benefits of exercise among pregnant women in Nsukka LGA based on Age(χ^2 = 1.678, *P*-value = .642>0.05) is accepted
2. The null hypothesis which states that there is no significant difference in the perceived health benefits of exercise among pregnant women in Nsukka LGA based on Level of Education(χ^2 = 234.354, *P*-value = 0.00<0.05) is rejected
3. The null hypothesis which states that there is no significant difference in the perceived health benefits of exercise among pregnant women in Nsukka LGA based on Occupation(χ^2 = .141, *P*-value = .932>0.05) is accepted.
4. The null hypothesis which states that there is no significant difference in the perceived health benefits of exercise among pregnant women in Nsukka LGA based on Location(χ^2 = .476, *P*-value = .490>0.05) is accepted.

Discussion

The findings in table 1 revealed that slightly higher proportion of pregnant women aged 32 years and above (97.3%) had more perceived health benefit of exercise than those less than pregnant women of 27-32(95.0 %), women of 23-27 years (87.4%) and women of 18-22 years (81.6%). This finding is in contrast with the finding by Mbada et. al., (2014) in which pregnant women less than 30 years reported more favourable attitude (59.4%) than those aged 30 years and above (40.6%). This contradiction in the two findings could be attributed to the difference in geopolitical zones of the country where the studies were carried out.

In table 2, 100% per cent of those with Primary School Education, 100% of those with secondary school Education and 99.4% of those with Tertiary Level of Education showed High perception on the health benefit of exercise. While pregnant women with no formal education showed a very low perception on the health benefit of exercise in pregnancy. Abugu and Samuel (2016) reveals that 100 per cent of pregnant women with no formal education, 82.6 per cent with tertiary, 76.9 with secondary and 65.7 per cent with primary demonstrated positive attitude towards antenatal exercise. This demographic distribution is in contrast with the study by Sujindra, Bupathy, Sugenya and Preveena, (2015) where 63 percent of the mothers have undergone only primary education and 74 percent of them were home makers**.** This difference could be attributed to different settings where the two studies were conducted.

Table 3 shows that higher proportion of pregnant women who are traders/artisans (99.4%) demonstrated more perceived health benefits of exercise than Civil servant (99.0%) and students (99.0%). This conforms with Abugu and Samuel who also showed that Traders/self-employed demonstrated more benefits of exercise than Civil servants and students in their work. This finding is consistent with the finding of Mbada et. al., (2014), and at variance with that of Put, Chuang and Chan, (2015). This could have resulted from similarities and differences of those studies with the present one.

The findings in table 4 revealed that slightly higher proportion of pregnant women in the Urban area (99.5%) had more perceived health benefit of exercise than pregnant women staying in the rural area (98.8 %). This work shows that pregnant women from both locations have a good perception towards exercise in pregnancy. This is in line with the work of Ojukwu et al (2017) the results revealed that a good number of pregnant women in the urban area have higher perception of the health benefit of exercise. This difference may be attributed to the high level of education and exposure to modern and recent trends of healthy lifestyle among women in the urban areas. Another possible reason may be the deficiency of health professionals in the rural areas.

The findings of the study on the null hypothesis showed that that there was no significant difference in the perceived health benefits of exercise among pregnant women in Nsukka LGA based on age. The result was unexpected and therefore surprising as one would expect that demographic factors such as age would influence Pregnant women's perception. This finding was consistent with the findings of Abugu and Samuel (2015) who reported that the slight difference based on age was not significant (P =.105 < .05).

The findings of the study also showed that there was a significant difference in the perceived health benefits of exercise among pregnant women in Nsukka LGA based on Level of Education. The was expected and therefore not surprising because educational level of women is capable of

increasing/influencing their experiences thereby influencing their perception. The findings correspond with study of Abugu and Samuel (2015) who reported there is significant difference in their attitude based on educational level. The finding is in contrast with that of Sujindra et. al., (2015) who found no significant difference in the attitude of mothers based on educational level in their study in India. This could be as a result of different Location.

Furthermore, the study showed that there was no signifiant difference in the perceived health benefits of exercise among pregnant women in Nsukka LGA based on Occupation. This result is surprising and unexpected as one would think that the level of the job one does will affect her perception towards exercise. The finding is in contrast with the work of Abugu and Samuel (2015) On the test of their hypotheses, the table showed an overall chi-square of 25.585 with a corresponding p-value of .038 less than .05 level of significance implying that there was a significant difference based on occupation.

Finally, the study showed that there was no significant difference in the perceived health benefits of exercise among pregnant women in Nsukka LGA based on Location. This result is surprising and unexpected as one would think that the high level of education and exposure to modern and recent trends of healthy lifestyle among women in the urban areas and possible deficiency of health professionals in the rural areas would affect to a great extent the perception of rural pregnant women on the health benefits of exercise in pregnancy. This finding is in contrast with the work of Ojukwu et al (2017) On the test of their hypotheses, which indicated a significant difference between perceived health benefits of exercise among pregnant women based on Location.

Conclusion

A greater portion of pregnant women in Nsukka LGA demonstrated a very perception of the health benefits of exercise. The different age groups view that exercise is associated with a wide range of health benefits.

Recommendation

1. Nurses in the area should also include benefits of exercise in their health talks during antenatal clinic to prevent the negative perception about pregnant mothers'.

2. Health care providers should be abreast with the latest recommendations on exercise as only then can they give appropriate exercise prescription.

3. Efforts should be made to encourage women regardless of parity to exercise as women who routinely exercise is more likely to continue to do so even during pregnancy.

4. Increased social support should be given to pregnant women to help them exercise. Thus, employers, parents, relatives and spouses of pregnant women should likewise be engaged through adequate and appropriate health education.

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