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Assessments of Food Consumption Patterns, Dietary Diversity and Lifestyle Practices of First-Time Pregnant Women in Abuja Municipal Area Council

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Abstract

Original Research Article

Background*:** The study analysed the assessments of food consumption patterns, dietary diversity, and lifestyle practices of first-time pregnant women in Abuja Municipal Area Council (AMAC), FCT, Abuja, Nigeria. ***Materials and Methods: A multi-stage sampling procedure was employed to draw 90 respondents. A structured questionnaire was employed for data collection, and the data retrieved were subjected to descriptive statistics. ***Results*:** The study showed that of first-time pregnant women, about 53.2% of the respondents were in their 1-3 month gestation period. The majority (53.3%) of the first-time pregnant women attended antenatal care between 1 and 2 times. Results of cooked food items consumed during the period of pregnancy showed that 68.9% of the pregnant women consumed cooked rice between 1-4 times per week, 67.8% consumed cooked cowpea between 1-4 times per week, and 81.1% consumed yam (pounded, porridge, and fried) between 1-4 times per week. Results on dietary changes made after becoming pregnant showed that the majority (88.9%) of the first-time pregnant women in the study area eliminated consuming cowpea, 86.7% of the respondents eliminated the consumption of sweet potatoes, 84.4% of the respondents eliminated the consumption of rice, and 81.1% eliminated the consumption of pounded yam. The results on new foods introduced during pregnancy showed that 100.0% of the first-time pregnant women in the study area consumed yam porridge, and 95.6% consumed vitamin C medication. ***Conclusions***: It was recommended that first-time pregnant women always eat balanced diets and take proper medication for their health and that of the foetus.

Keywords: Food, first time, pregnant, mothers, Abuja, municipal.

INTRODUCTION

Good nutrition is considered as a paramount component of health and development [1]. Good maternal nutrition pregnancy has over time been considered as a key determinant of the health of both child and mother [2]. Different national and international organizations advocate dietary improvement, such as adhering to the balanced diet, which is characterized by a high content of fruits, vegetables, olive oil, legumes, dairy products, and nuts, and recommend minimal intake of red meat, animal fats, sugars, and salt [3]. Despite evidence supporting the importance of maternal nutrition, few women follow adequate diets during pregnancy [4]. Pregnant women who are overweight or obese (body mass index >26 kg/m2) or women with higher weight gains during pregnancy are at a higher risk for unfavorable birth outcomes, such as pregnancy hypertension, high-birth-weight baby, preeclampsia, and emergency cesarean delivery [5]. Maternal smoking is associated with higher rates of abnormal fetal heart rate tracings during labor and higher rates of low-birth-weight babies [6]. Poor nutrition practice during pregnancy is linked with gestational weight gain, increased maternal infections, preeclampsia, anemia, preterm birth or miscarriage [7]. Although poor dietary intake is a common cause of micronutrient deficiencies, the root cause is linked with low socioeconomic status and lack of knowledge about healthy eating patterns [8]. The aim of the study was to assess the food consumption pattern, dietary diversity and lifestyle practices of first-time pregnant women in Abuja Municipal Area Council (AMAC). A better understanding of maternal diets and their domains of influence in this setting could inform strategies to promote consumption of nutritive foods by pregnant women vulnerable to malnutrition and pregnancy complications. Understanding the reasons behind dietary change during pregnancy will help researchers and health professionals design effective strategies and public health messages to promote healthier pregnancies. A healthy, balanced diet during pregnancy is essential to support optimal growth and development of the fetus and the physiological changes that occur in the mother. Balanced nutrition during pregnancy helps for the expected weight gain of the mother and the growth and development of the fetus [9]. It also helps to improve birth outcomes and prevent the child from developing diseases such as heart disease and obesity later in life. It is a concept that encompasses a wide range of support systems for the emotional, device, information, and evaluation aspects. Social support has a major role in changing lifestyle managements [10].

MATERIALS AND METHODS

Research design: This research was designed as a descriptive survey and cross sectional study of the Assessments of Food Consumption Patterns, Dietary Diversity And Lifestyle Practices of First-Time Pregnant Women In Abuja Municipal Area Council.

Study Area: the study was carried out in Abuja which is the capital city of Nigeria located in the center of the country within the Federal Capital Territory (FCT). Abuja is Nigeria's administrative and political center. The indigenous inhabitants of Abuja are the Gbagyi (Gwari), Bassa, Gwandara, Gade, Dibo, and Koro. Abuja features a tropical wet and dry climate. The FCT experiences three weather conditions annually. This includes a warm, humid rainy season and a blistering dry season.

Sample population and duration: The target population for this study consisted of first-time pregnant women (primigravidas) that attends antenatal clinic. The accessible population for the study were the expectant mothers (first-time pregnant women) that were in attendance in the hospitals selected for the study on the day the researcher visited those hospitals to collect data for the study. The study lasted for the period of 8 weeks.

Sampling technique: A multistage sampling technique was adopted for the study. Three general hospitals were randomly selected for the study. In each hospital, Thirty (30) first-time pregnant women were randomly selected from the list of primipravidas attending antenatal clinic in each of the hospitals to give a total of ninety (90) respondents for the study.

Eligibility criteria

***Inclusion criteria*:** all first time (primigravidas) pregnant women

Exclusion criteria*:* obsessed pregnant women. Pregnant women who were constantly sick on intervals of days. Pregnant women who could not write nor speak English.

Method of data collection:

Data were collected through the use of structured questionnaire. The information on the questionnaire covered the socioeconomic characteristics of the respondents, dietary changes of the first-time pregnant women, pattern of dietary changes, factors that influence food consumption among the first-time pregnant women in the study area.

Data on Dietary changes were collected using a Dietary Changes Questionnaire (DCQ) [11]. For each of the items changed, participants were asked to include the frequency of consumption before and during pregnancy, the normal serving size, and the reason for the change.

Food, Beverage, and Medication Intake Questionnaire (FBMIQ) adopted from [12] was used to collect information on food consumption habits of the primigravidas. FBMIQ measures common practices of maternal consumption during pregnancy. Foods items consumed will include cooked food, Beverage, meat, fish, fruits, sugar containing food [e.g. chocolate], alcohol and local drinks intake.

Data analysis: All the objectives were achieved using descriptive analysis which involves frequency counts, percentages, mean and charts.

Ethical consideration

Ethical approval was obtained from the ethics committee of the three general hospitals were data was collected to ascertain no exposure of damage or risks to the pregnant women.

RESULTS

Table 1: Showing the Socio-economic Characteristics of Respondents of First-Time Pregnant Women in Abuja Municipal Area Council

Variable	Frequency	Percentage (%)	Mean
Age (Years)			
18-28	62	68.9	
29-38	27	30.0	26 Years
Above 38	1	1.1	
Maiden age (Years)			
17-27	57	63.3	25 Years
28-37	33	36.7	
Level of education			
Non-formal education	1	1.1	
Primary	12	13.3	
Secondary	31	34.4	
Tertiary	46	51.1	
Marital status			
Single	24	26.7	
Married	62	68.9	
Divorced/separated	4	4.4	
Household size (number of persons)			
1-5	54	60.0	
6-10	35	38.9	5 Persons
11-15	1	1.1	
Occupation			
Farming	21	23.3	
Business	29	32.2	
Civil servant	31	34.4	
Unemployed	9	10.0	
Month of gestation (months)			
1-3	48	53.2	
4-6	32	35.6	
7-9	10	11.1	
Where food is gotten to feed family			
Own farm	24	26.7	
Purchased	59	65.6	
Own farm livestock	7	7.7	
Number of times attended antenatal (times)			
Did not attend antenatal	29	32.2	
1-2	48	53.3	1 time
3-4	13	14.4	
Month of pregnancy confirmation			
First month	65	72.2	
Second month	17	18.9	
Third month	8	8.9	
Monthly expenditure (in naira)			
1,000-20,000	49	54.4	N24,988.89
21,000-40,000	27	30.0	
41,000-60,000	12	13.3	
Above 60,000	2	2.2	
Total	**90**	**100.0**	

The study revealed that majority (68.9%) of first-time pregnant women in Abuja Municipal Area Council (AMAC) were between the ages of 18-28 years. The average age of first-time pregnant women in the study area was 26 years. Similarly, the maiden age of first-time pregnant women in Abuja Municipal Area Council shows that majority (63.3%) were between the maiden ages of 17-27 years an average maiden age of 25 years. This implies that first-time pregnant women and the maiden age first-time pregnant women in the study area were predominantly young- women. Majority (68.9%) of the first-time pregnant women in Abuja Municipal Area Council were married, 26.7% of the respondents were single while 4.4% of the respondents were either divorced/separated. Majority (60.0%) of the respondents had between 1 and 5 persons in their households, with an average household size of 5 persons. A little above half of the respondents had tertiary education, 34.4% of the respondents had secondary education, 13.3% had primary education while only 1.1% had no formal education. However, 10.0% were unemployed. As at the time of this study further showed that of first-time pregnant women, about 53.2% of the respondents were in the first trimester of pregnancy, while only about 46.7% were at an advance stage of pregnancy. Majority (65.6%) of the respondents purchased food to feed their families, while others feed their families from their own crop f and livestock farms. Majority (53.3%) of the first-time pregnant women attended antenatal care between 1-2 times while about 32.2% of the respondents have never attended antenatal care. The results in this table show the average monthly expenditure on food items. Majority (54.4%) of the respondents spent between ₦ 1,000- ₦ 20,000 per month on food items. The average expenditure per month was ₦ 24,988.89.

Table 2: Showing Food Consumption Habits of the of First-Time Pregnant Women in Abuja Municipal Area Council

Food Items Consumed during the period of your pregnancy		
Food	**Frequency**	**Percentage (%)**
Cooked food category		
Rice (number of times consumed in a week)		
Never consumed	3	3.3
1-4	62	68.9
5-8	21	23.4
Above 8	4	4.4
Cowpea(number of times consumed in a week)		
Never consumed	4	4.4
1-4	61	67.8
5-8	24	26.7
Above 8	1	1.1
Yam (number of times consumed in a week)		
Never consumed	1	1.1
1-4	73	81.1
5-8	10	17.8
Above 8	0	0.0
Swallow (number of times consumed in a week)		
Never consumed	16	17.8
1-4	54	60.0
5-8	20	22.2
Above 8	0	0.0
Pregnancy Period trimester for cooked food category		
1	39	43.3
2	40	44.4
3	11	12.3
Meat category		
Chicken (number of times consumed in a week)		
Never consumed	14	15.6
1-4	68	75.5
5-8	8	8.9
Above 8	0	0.0
Beef (number of times consumed in a week)		
Never consumed	14	15.6
1-4	53	58.8
5-8	23	25.6
Above 8	0	0.0

Food Items Consumed during the period of your pregnancy		
Food	**Frequency**	**Percentage (%)**
Pregnancy Period trimester for meat category		
1	39	43.3
2	39	43.3
3	12	13.4
Fish category		
All kinds of fish (number of times consumed in a week)		
Never consumed	7	7.8
1-4	67	74.4
5-8	15	16.7
Above 8	1	1.1
Tilapia (number of times consumed in a week)		
Never consumed	27	30.0
1-4	55	61.1
5-8	7	7.8
Pregnancy Period trimester for fish category		
1	51	56.7
2	28	31.1
3	11	12.2
Fruits category		
Water melon (number of times consumed in a week)		
Never consumed	1	1.1
1-4	36	40.0
5-8	49	54.5
Above 8	4	4.4
Apple (number of times consumed in a week)		
Never consumed	14	15.6
1-4	36	40.0
5-8	35	38.8
Above 8	5	5.6
Pineapple (number of times consumed in a week)		
Never consumed	4	4.4
1-4	40	44.4
5-8	41	45.6
Above 8	5	5.6
Orange (number of times consumed in a week)		
Never consumed	7	7.8
1-4	27	30.0
5-8	49	54.4
Above 8	7	7.8
Pregnancy Period trimester for fruits category		
1	39	43.3
2	39	43.3
3	12	13.4
Sugary category		
Chocolate (number of times consumed in a week)		
Never consumed	30	33.3
1-4	56	62.3
5-8	4	4.4
Above 8	0	0.0
Pregnancy Period trimester for sugary category		
1	39	43.3
2	40	44.4
3	11	12.3
Fast foods category		
Never consumed	63	70.0
1-4	7	7.8

Food Items Consumed during the period of your pregnancy		
Food	**Frequency**	**Percentage (%)**
5-8	1	1.1
Above 8		
Pap (number of times consumed in a week)		
Never consumed	6	6.7
1-4	58	64.4
5-8	25	27.8
Above 8	1	1.1
Tea (number of times consumed in a week)		
Never consumed	81	90.0
1-4	7	7.8
5-8	2	2.2
Above 8	0	0.0
Pregnancy Period trimester for fast foods	45	50.0
1	31	34.4
2	14	15.6
3	81	90.0

Table 2 shows the results for the cooked food items consumed during the period of pregnancy is presented above. The results showed that 68.9% of the first time pregnant women consumed cooked rice between 1-4 times/week, 67.8% of the respondents consumed cooked cowpea between 1-4 times/week, 81.1% of the respondents consumed yam (pounded, porridge and fried) between 1-4 times/week and 60.0% of the respondents consumed swallow between 1-4 times/week. These food items were consumed majorly in the 2nd trimester of pregnancy. **Meat/Fish category**; the result showed that 75.5% of the first time pregnant women consumed chicken between 1-4 times/week, 58.8% of the respondents consumed beef between 1-4 times/week. Similarly, 78.4% of the respondents consumed all kinds if fish between 1-4 times/week and 61.1% of the respondents consumed tilapia fish between 1- 4 times/week. The results of the trimester of consuming these meat and fish items showed that 56.7% consumed the meat/fish in their 1st trimester, 31.1% consumed meat/fish in their 2nd trimester while 12.2% consumed the meat/fish in their 3rd trimester. **Fruits category**; results showed that 54.5% of the first time pregnant women consumed water melon between 1-4 times/week, 40.0% of the respondents consumed apple between 1-4 times/week, 38.8% of the respondents consumed apple between 5-8 times/week. 40.0% of the respondents consumed pineapple between 5-8 times/week and 44.4% of the respondents consumed apple between 1-4 times/week. 54.4% of the respondents consumed orange between 1-4 times/week and 30.0% of the respondents consumed orange between 1-4 times/week. The results of the trimester of consuming these fruits items showed that 43.3% consumed the fruits in their 1st trimester and another 43.3% in their 2nd trimester with only 13.4% consumed fruits in their 3rd trimester. **Sugary category;** results showed results that 62.3% of the first time pregnant women consumed chocolate between 1-4 times/week, 74.4% of the respondents consumed ice cream between 1-4 times/week while, 46.7%, of the respondents consumed baked food between 1-4 times/week and 46.7% of the respondents did not consumed baked food completely. The results of the trimester of consuming these sugary food items showed that 44.4% consumed the sugary food items in their 2nd trimester, 43.3% in their 1st trimester and 12.3% consumed sugary food items in their 3rd trimester. **Fast food category;** results showed results that 70.0% of the first time pregnant women consumed snacks between 1-4 times/week, 64.4% of the respondents consumed pap between 1-4 times/week while, 7.8%, of the respondents consumed tea between 1-4 times/week. 90.0% of the respondents did not consumed tea completely. The results of the trimester of consuming these fast food items showed that 50.0% consumed the fast food items in their 1st trimester, 34.4% in their 2nd trimester and 15.6% consumed fast food items in their 3rd trimester.

Table 3: Food Consumption Habits (Drinks and Medications) of the of First-Time Pregnant Women in Abuja Municipal Area Council

Beverages consumed during the period of your pregnancy		
Bevarages	**Frequency**	**Percentage (%)**
Water category		
Bottle water (number of times consumed in a week)		
Never consumed	19	21.1
1-4	34	37.8
5-8	28	31.1
Above 8	9	10.0

Beverages consumed during the period of your pregnancy		
Bevarages	**Frequency**	**Percentage (%)**
Sachet water (number of times consumed in a week)		
Never consumed	27	30.0
1-4	13	14.4
5-8	22	24.4
Above 8	28	31.2
Well water (number of times consumed in a week)		
Never consumed	77	85.6
1-4	7	7.7
5-8	6	6.7
Above 8	0	0.0
Tap water (number of times consumed in a week)		
Never consumed	16	17.8
1-4	11	12.2
5-8	39	43.3
Above 8	24	26.7
Pregnancy Period trimester for water category		
1	44	48.9
2	31	34.4
3	15	16.7
Milk category		
Cow milk (number of times consumed in a week)		
Never consumed	24	26.7
1-4	40	44.4
5-8	24	26.7
Above 8	2	2.2
Whole milk (number of times consumed in a week)		
Never consumed	21	23.3
1-4	34	37.8
5-8	34	37.8
Above 8	1	1.1
Fura da nono (number of times consumed in a week)		
Never consumed	15	16.7
1-4	43	47.8
5-8	25	27.8
Above 8	7	7.7
Pregnancy Period trimester for milk category		
1	44	48.9
2	30	33.3
3	16	17.8
Juice Category		
Orange Juice (number of times consumed in a week)		
Never consumed	24	26.7
1-4	55	61.1
5-8	11	12.2
Above 8	0	0.0
Apple juice (number of times consumed in a week)		
Never consumed	47	52.2
1-4	37	41.1
5-8	6	6.7
Above 8	0	31.1
Juice blend (number of times consumed in a week)		
Never consumed	28	31.1
1-4	27	30.0
5-8	24	26.7
Above 8	11	12.2
Pregnancy Period trimester for juice category		

Beverages consumed during the period of your pregnancy		
Bevarages	**Frequency**	**Percentage (%)**
1	48	53.3
2	23	25.6
3	18	21.1
Caffeine category		
Colas (number of times consume in a week)		
Never consumed	74	82.2
1-4	14	15.6
5-8	2	2.2
Above 8	0	0.0
Caffeine (number of times consumed in a week)		
Never consumed	2	2.2
1-4	23	25.6
5-8	59	65.6
Above 8	6	6.6
Tea (number of times consumed in a week)		
Never consumed	50	55.6
1-4	31	34.4
5-8	8	8.9
Above 8	1	1.1
Energy drinks (number of times consumed in a week)		
Never consumed	50	55.6
1-4	31	34.4
5-8	8	8.9
Above 8	1	1.1
Pregnancy Period trimester for caffeine category		
1	34	37.7
2	33	36.7
3	23	25.6
Alcohol category		
Wine (number of times consumed in a week)		
Never consumed	32	35.5
1-4	51	56.7
5-8	7	7.8
Above 8	0	0.0
Beer (number of times consumed in a week)		
Never consumed	67	74.4
1-4	22	24.5
5-8	1	1.1
Above 8	0	0.0
Mixed drinks		
Never consumed	68	75.6
1-4	22	24.4
5-8	0	0.0
Above 8	0	0.0
Shorts/liquor (number of times consumed in a week)		
Never consumed	72	80.0
1-4	18	20.0
5-8	0	0.0
Above 8	0	0.0
Pregnancy Period trimester for alcohol category		
1	35	38.9
2	32	35.6
	23	25.5
Local drinks category		
Kunu (number of times consumed in a week)		
Never consumed	3	3.3

Beverages consumed during the period of your pregnancy		
Bevarages	**Frequency**	**Percentage (%)**
1-4	51	56.7
5-8	36	40.0
Above 8	0	0.0
Zobo (number of times consumed in a week)		
Never consumed	8	8.9
1-4	56	62.2
5-8	24	26.7
Above 8	2	2.2
Ginger drink (number of times consumed in a week)		
Never consumed	35	38.9
1-4	50	55.6
5-8	5	5.6
Above 8	0	0.0
Pregnancy Period trimester for local drinks foods		
1	41	45.6
2	32	35.6
3	17	18.9
Over the counter medication		
Acetaminophen (number of times)		
Never consumed	36	40.0
1-4	34	37.8
5-8	24	22.2
Cough and cold medicines		
Never consumed	70	77.8
1-4	12	13.3
5-8	8	8.9
Ibuprofen		
Never consumed	71	78.9
1-4	10	11.1
5-8	9	10.0
Aspirin		
Never consumed	79	87.8
1-4	9	10.0
5-8	2	2.2
Decongestants		
Never consumed	78	86.7
1-4	9	10.0
5-8	3	3.3
Trimester period		
1	37	41.1
2	34	37.8
3	19	21.1
Prescription Medication		
Decongestants		
Never consumed	27	30.0
5-8	63	70.0
Morning sickness		
Never consumed	74	82.2
1-4	7	7.8
5-8	9	10.0
Pain medicines		
Never consumed	77	85.6
1-4	8	8.9
5-8	5	5.6
Trimester period		
1	44	48.9

Beverages consumed during the period of your pregnancy		
Bevarages	**Frequency**	**Percentage (%)**
2	34	37.8
3	12	13.3

Milk category; results showed that 44.4% of the first time pregnant women consumed cow milk between 1-4 times/week and 26.7% of the respondents consumed cow milk between 5-8 times/week. About 37.8% of the respondents consumed whole milk between 1-4 times/week and another 37.8% of the respondents consumed whole milk between 5-8 times/week. Results also revealed that about 47.8% consumed Fura da nono between 1-4 times/week and 27.8% of the respondents consumed Fura da nono between 5-8 times/week. The results of the trimester of consuming milk category showed that 48.9% consumed milk items in their 1st trimester, 33.3% in their 2nd trimester and 17.8% consumed milk in their in their 3rd trimester. **Juice category;** showed that 61.1% of the first time pregnant women consumed orange between 1-4 times/week, 52.2% of the respondents consumed apple between 1-4 times/week while, 30.0%, of the respondents consumed juice blend between 1-4 times/week and 26.7% of the respondents did not consumed juice blend at all. The results of the trimester of consuming these juice items showed that 53.3% consumed the juice items in their 1st trimester, 25.6% in their 2nd trimester and 21.1% consumed juice items in their 3rd trimester. **Caffeine category,** showed that 82.2% of the first time pregnant women never consumed Colas during their gestation period. Only 15.6% and 2.2% of the respondents consumed ice cream between 1-4 and 5-8 times/week respectively. Majority 84.4%, of the respondents never consumed Caffeine during their gestation period. About 13.4% and 2.2% of the respondents consumed Caffeine between 1-4 and 5-8 times/week. Majority (65.6%) of the respondents consumed tea between 5-8 times/week. Results also showed that 55.6% of the respondents never consumed energy drink while 34.4% of the respondents consumed energy drink between 1-4 times/week. The results of the trimester of consuming these Caffeine items showed that 38.9% consumed the Caffeine items in their 1st trimester, 35.6% in their 2nd trimester and 25.5% consumed Caffeine items in their 3rd trimester. **Alcohol category;** results showed that 56.7% of the first time pregnant women consumed wine between 1-4 times/week and 7.8% of the respondents consumed wine between 5-8 times/week. Majority (74.4%) of the respondents never consumed beer during their gestation period while only 25.5% of the respondents consumed beer between 1-4 times/week. About 75.6% of the respondents never consumed mixed drinks during their gestation period. However, 24.4% of the respondents consumed mixed drinks between 1-4 times/week. Results further revealed that 80.0% of the respondents never consumed shorts/liquor during their gestation period however, 20.0% of the respondents consumed shorts/liquor between 1-4 times/week. The results of the trimester of consuming these alcohol showed that 38.9% consumed the alcohol in their 1st trimester, 35.6% in their 2nd trimester and 25.5% consumed alcohol in their 3rd trimester. **Local drinks;** results showed that 56.7% of the first time pregnant women consumed Kunu between 1-4 times/week and 40.0% of the respondents consumed Kunu between 5-8 times/week while, 62.2% of the respondents consumed Zobo drink between 1-4 times/week, 26.7% of the respondents consumed Zobo drink between 5-8 times/week and 2.2% consumed Zobo more than 8 times/week. The results of the trimester of consuming these local drinks showed that 45.6% consumed the local drinks in their 1st trimester, 35.6% in their 2nd trimester and 18.9% consumed local drinks in their 3rd trimester. **Over the counter medication;** results showed that 37.8% of the first time pregnant women consumed Acetaminophen over the counter between 1-4 times/week, 22.2% of the respondents consumed Acetaminophen between 5-8 times/week. 77.8%, of the respondents consumed cough and cold medicines over the counter while 13.3% of the respondents consumed cough and cold medicines over the counter between 1-4 times/week and 8.9% of the respondents consumed cough and cold medicines over the counter between 5-6 times/week. Majority (87.8%) of the respondents never consumed Ibuprofen over the counter, 10.0% of the respondents consumed Ibuprofen over the counter between 1-4 times/week and 2.2% of the respondents consumed Ibuprofen over the counter between 5-8 times/week. About 86.7% of the respondents never consumed decongestants over the counter with only 10.0% of the respondents consuming decongestants between 1-4 times/week over the counter medication. The results of the trimester of consuming over the counter medication showed that 41.1% consumed the juice items in their 1st trimester, 37.8% in their 2nd trimester and 21.1% consumed over the counter medication in their 3rd trimester. **Prescription medication;** results showed that 70.0% of the first time pregnant women consumed decongestants medication as prescript between 5-8 times/week. 82.2% of the respondents never consumed morning sickness , 10.0% of the respondents consumed morning sickness medication as prescript between 5-8 times/week while 7.8% of the respondents consumed morning sickness medication as prescript between 1-4 times/week as prescript. Results revealed also that 85.6% of the respondents never consumed pain relieving medicines. However, 8.9% of the respondents consumed pain relieving medicines between 1-4 times/week and 5.6% of the respondents consumed pain relieving medicines between 5-8 times/week. The results of the trimester of consuming over the prescription medication showed that 48.9% consumed prescription medication in their 1st trimester, 37.8% in their 2nd trimester and 13.3% consumed prescription medication in their 3rd trimester.

Table 4: Dietary Changes Made Since Becoming Pregnant of the First-Time Pregnant Women in Abuja Municipal Area Council

Dietary Changes Made since Becoming Pregnant		
Dietary Changes	**Frequency**	**Percentage (%)**
Completely Eliminated		
Food		
Beans (Cowpea)	80	88.9
Rice	76	84.4
Sweet potato	78	86.7
Pounded yam	73	81.1
Beverages		
Kunu	78	86.7
Zobo	58	64.4
Medication		
Panadol	39	43.3
Flaggle	13	14.4
Decrease intake specific foods or beverages and medication		
Food		
Jollof Rice	87	96.7
Plantain	88	97.8
Semovita	86	95.6
Beverages		
Ginger drink	86	95.6
Medication		
Folic acid	68	75.6
New food or beverages and medication consumed during pregnancy		
Food	90	100.00
Yam porridge		
Beverage	85	94.4
Tiger nut drink		
Medication	86	95.6
Vitamin C		

The results on food completely eliminated in Table 4 showed that majority of the first time pregnant women in the study area eliminated consuming cowpea, 86.7% of the respondents eliminated the consumption of sweet potato, 84.4% of the respondents eliminated the consumption of rice and 81.1% eliminated the consumption of pounded yam.

Beverages completely eliminated during pregnancy

From the results in table 4, 86.7%of the respondents eliminated the consumption of kunu and 64.4% of the respondents eliminated the consumption of zobo drink. **Medication completely eliminated during pregnancy**; results showed that about 43.3% of the respondents eliminated the consumption of Panadol while 14.4% of the respondents eliminated the consumption of flaggle. **Food, beverages and medication decreased during pregnancy;** the results on food intake reduced during pregnancy in table 4 showed that majority 96.7% of the first time pregnant women in the study area decreased the consumption Jollof rice, 97.8% of the respondents decreased the consumption of plantain and, 95.6% of the respondents decreased the consumption of semovita. **Beverages**; the results on beverages intake reduced during pregnancy in table 4 showed that majority 95.6% of the first time pregnant women in the study area decreased the consumption ginger drink. **Medication;** majority 95.6% of the first time pregnant women in the study area introduced the consumption Vitamin C medication. The reason for introducing vitamin C during pregnancy is for tissue repair and wound healing and it helps the foetus' bones and teeth development.

DISCUSSIONS

Summary of Results

The study revealed that majority (68.9%) of first-time pregnant women in Abuja Municipal Area Council (AMAC) were between the ages of 18-28 years the average age of 26 years. The result shows that 51.1% of the respondents had tertiary education. Results further revealed that about 53.2% of the respondents were in the range of between 1-3 months of their gestation period. Majority (65.6%) of the respondents purchased food to feed their families. Results of findings also revealed that majority (53.3%) of the first-time pregnant women attended antenatal care between 1-2 times. Results showed that 72.2% of the first-time pregnant women had their pregnancy confirmed in the first month of their pregnancy. Results further revealed that majority (72.2%) of the first-time pregnant women had their pregnancy planned.

The results on food items consume during the period of your pregnancy showed that majority consumed cooked food such as rice, cowpea, yam and swallow between 1-4 times/week with most 44.4% of the respondents consuming these cooked food in their 2nd trimester. Similarly, results on meat and fish items were consumed 1-4 times/week. The results of the trimester of consuming these meat and fish items showed that 56.7% consumed the meat/fish in their 1st trimester. Most 54.5% of the first time pregnant women consumed water melon between 1-4 times/week and 54.4% of the respondents consumed orange between 1-4 times/week with 43.3% consuming these fruits items in their 1st trimester. Results showed 44.4% of the first time pregnant women consumed sugary food items in their 2nd trimester. Similarly, 50.0% consumed the fast food items in their 1st trimester. The results of the trimester of consuming this water category showed that 48.9% consumed water category in their 1st trimester. The results of the trimester of consuming milk category showed that 48.9% consumed milk items in their 1st trimester. The results of the trimester of consuming these juice items showed that 53.3% consumed the juice items in their 1st trimester. The results of the trimester of consuming these Caffeine items showed that 38.9% consumed the Caffeine items in their 1st trimester. The results of the trimester of consuming these alcohols showed that 38.9% consumed the alcohol in their 1st trimester. The results of the trimester of consuming these local drinks showed that 45.6% consumed the local drinks in their 1st trimester. About 41.1% consumed the juice items in their 1st trimester. The results of the trimester of consuming over the prescription medication showed that 48.9% consumed prescription medication in their 1st trimester.

The results on food completely eliminated showed that majority (88.9%) of the first-time pregnant women in the study area eliminated consuming cowpea, 86.7% of the respondents eliminated the consumption of sweet potato, 84.4% of the respondents eliminated the consumption of rice and 81.1% eliminated the consumption of pounded yam. About 86.7%of the respondents eliminated the consumption of kunu and 64.4% of the respondents eliminated the consumption of zobo drink. About 43.3% of the respondents eliminated the consumption of Panadol while 14.4% of the respondents eliminated the consumption of flaggle. The results on food intake reduced during pregnancy showed that majority 96.7% of the first-time pregnant women in the study area decreased the consumption Jollof rice, 97.8% of the respondents decreased the consumption of plantain and, 95.6% of the respondents decreased the consumption of semovita. Majority 95.6% of the first-time pregnant women in the study area decreased the consumption ginger drink. The results on medication intake reduced during pregnancy also showed that majority 75.6% of the first time pregnant women in the study area decreased the consumption Folic acid. The results on new food introduced during pregnancy showed that all (100.0%) of the first time pregnant women in the study area introduced the consumption yam porridge. Majority 94.4% of the first time pregnant women in the study area introduced the consumption tiger nut drink. Results revealed that majority 95.6% of the first time pregnant women in the study area introduced the consumption of Vitamin C medication.

Implications of the study

The findings from this study imply that first-time pregnant women and the maiden age first-time pregnant women in the study area were predominantly young- women aged 18-28 years of age. Also, this study implies that first-time pregnant women were engaged in various forms of income generation activities. The respondents in the study area participated in crop and livestock farming to cut down income expenditure on food. This implies that the first time pregnant women of this study consumed a certain amount of water during their first trimester. During pregnancy, requirements of water and fiber increase due to increased uterus weight and reduced bowel motility resulting from higher levels of progesterone [13]. Furthermore, this study implies that majority of the first-time pregnant women knew about the importance of antenatal care, and they consumed more of sugary food and less water in their first trimester. The first time pregnant women also consumed a lot of vitamin C medication. However, because vitamin C is water soluble and heat labile, recommendations must stress the importance of the retention of vitamin C during food preparation and cooking [14]. Diet is a concept that encompasses a wide range of support systems for the emotional, device, information, and evaluation aspects. Social support has a major role in changing lifestyle managements [10]. It has been observed from this study that the food consumption patterns and lifestyle of first time pregnant mothers are also the same in the hospitals visited, they consume a lot the same foods and medications, and they also have idea on antenatal care.

The literatures indicate that both under-nutrition and over-nutrition during pregnancy have been associated with clinical complications including hypertensive disorders of pregnancy and gestational diabetes, which can lead to adverse neonatal and infant condition [15]. The report of this study is in line with that of Costanza [16] in which they reported the assessment of pregnancy dietary intake and association with the maternal and neonatal outcome, which showed that when women did not achieve the minimum recommended intake for either dietary component it affects the neonatal outcome. And as such women are encouraged to eat good diets since it determines the outcome of their babies.

CONCLUSION

Conclusively the assessments of food consumption patterns, dietary diversity and lifestyle practices of first-time pregnant women brought about a better understanding of maternal diets and their domains of influence in this setting which promote consumption of nutritive foods by pregnant women vulnerable to

malnutrition and pregnancy complications. First-time pregnant women should always eat balance diets and take proper medication for their health and that of their unborn baby.

Hence, measures that promote healthy nutrition during pregnancy are therefore essential, taking into account that the maternal dietary pattern can be associated with socio-economic, cultural and lifestyle factors. It is evident that health-promoting lifestyle behaviours during pregnancy are essential in maintaining women's health in order to deliver healthy infants and to decrease the risk of low birth weight.

RECOMMENDATIONS

First-time pregnant women should always eat balance diets and take proper medication for their health and that of their unborn baby.

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