



Food preferences and nutritional status of pregnant Nigerian women, in Nigeria

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Abstract

The nutritional status of a woman during pregnancy is important, as such optimal diet impacts negatively on the health of the mother the foetus and newborn. This study assessed the nutritional status of pregnant women living in different socioeconomic conditions in Rivers State. A cross-sectional study was carried out amongst pregnant women attending selected government health centres in Port Harcourt. A total of 150 (19 – 48 years), consisting of pregnant women were selected for the study. Demographic data were collected using structured questionnaires, the data were analysed using SPSS version 16. The result reviewed that majority (64.6%) of the respondents reported being married most (45.9%) of them where 19 – 33 years of age and 8% of the pregnant women eats once in a day, while 60% eats thrice a day. About 53.3% of the pregnant women under study eats breakfast daily. It was also observed that 100% of them consume vegetables. Varieties of food were being eaten by the participants, like rice with a percentage of 90 among others. Based on the findings of this study, it was therefore recommended that pregnant women should eat healthy and nutritious foods along with fruits and vegetables with adequate proteinous foods for the well growth and development of the unborn.

Keywords: food preferences, pregnant Nigerian women, foetus and newborn

Introduction

Food preferences or choices among individuals have an indispensable influence on the eventual dietary practices of individual. The dietary practices of a population compass their consumption pattern of food, dietary or nutrient intake of individual and household in the population, frequently of intake of various food groups and food practices before and after consumption.

It is widely recognized that current dietary behavior is often poorly in line with health recommendations. Therefore, it is often desirable to try to change unhealthy behaviour from a public health perspective. However, some studies showed that it is very difficult to effectively change consumer's food choices and dietary behaviour (Glasgow *et al*, 2003) ^[1]. The extent to which nutrition education programs can facilitate dietary change is likely to be influenced by behaviour characteristics such as the habit persistence in diets, perception of health risks, expectancies and motivation for dietary change (Bahargava and Hays, 2004) and (Triandis, 1997) ^[3] defined habits as situation behaviour sequences that are or have become automatic, so that they occur without self-instruction. Habit plays an important role in the context food choice as consumption of food is frequently performed (Sab and Di Natale, 1999). However, specific events or changes in life can also have a major impact upon these habits. For example, when people become part of a couple, their diets change (Paisley *et al*, 2001) ^[5]. At this stage in life women may be adjusting their food intake to coincide with those of their partners (Anderson, 2001) ^[6]. Another crucial event or change in life, may pertain to pregnancy, in general, pregnancy occurs in early adulthood when many women are still forming their adult dietary patterns and thus food patterns are less likely to be bound by strong habits.

During pregnancy, women are more conscious of food and wealth issues because two lives are involved (Anderson,

2001). Pregnancy is a critical period during which good material nutrition is a key factor influencing the health of both mother and child. Following an appropriate diet will provide the necessary amounts and varieties of nutrients to ensure an optimal health for both the mother and the baby. Pregnant women require more energy and nutrients to meet the demands of the developing foetus and can select suitable servings of food to meet their increased needs (Kaiser and Allen, 2002) ^[7].

Given the importance of pregnancy in people's life cycle some diet and lifestyle health risks involve, and the fact that specific dietary recommendations are issues being pregnant can be assumed to lead to different food choices, which makes pregnant women an interesting target group for communities and information on current and future nutritional choices. To gain insight into the most effective way to induce dietary changes, it is important to analyze whether pregnant women have different beliefs, behaviour and dietary patterns as compared to non-pregnant women. In recent time, the high risk of morbidity and mortality a pregnant mother is exposed to, which is due largely to nutritional inadequate intake, has been a major source of worry to health practitioners, governmental health agencies and families. This factor that has the capacity to enhance or limit the nutritional needs of pregnant women require proper identification. Hence, it is imperative to examine the food preference of pregnant women in an urban setting for proper and appropriate intervention.

Materials and Methods

Study area

The study was carried out at the antenatal clinic and wards of government model primary health centre in Orogbum, government model primary health Care centre in Mgbundumkwu and Government Model Health care centre in Nkpolu-oroworukwo, all in Port Harcourt city.

Population of the Study

The study was a cross-sectional. The study population consists of all the pregnant women registered for antenatal at the above named three (3) randomly selected health centers in Port Harcourt.

Sample size and sampling technique

A total of 150 pregnant women were randomly selected from the three clinic. The instrument for data collection was a well-structured questionnaire which was developed based on the objectives of the study. The questionnaire was divided into four (4) sections, A, section was based on the socio-demographic profile of the subjects, section B, which was based on the consumption pattern; section C which was based on their food preference and section D, the type of food consumed. The questionnaires were administered directly to the pregnant women receiving antenatal care at the clinics.

Statistical Analysis

Data obtained from the study were analyzed using statistical product and service solution version 22. Descriptive (frequencies percentages, means and standard deviations) were done

Results

The socio-demographic characteristics of the pregnant women is presented in Table 1. Most (45.5% the respondents were 19 – 38 years of age, 64.6% the married. Majority 48.6% the respondents had tertiary education and 34.7% had secondary education about 62.4% were civil servant, while 26.8% of them were traders.

Table 1: Socio-demographic characteristics of the respondents

Age (years)	Frequency	Percentage (%)
19 – 23	17	11.3
24 – 28	22	14.6
29 – 33	30	20.0
34 – 38	38	25.5
39 – 43	25	16.6
44 – 48	18	12.0
Total	150	100
Married		
Single	38	25.4
Married	97	64.6
Divorced	15	10.0
Total	150	100
Educational Status		
Name	4	2.7
Elementary	21	14.0
Secondary	52	34.7
Tertiary	73	48.6
Total	150	100

Table 2 shows the food consumption frequency of the pregnant women. It shows that protein is being consumed daily by 54.3% 26.7% at least weekly and 18% consumed 2 – 4 times monthly. On the basis of dairy product, 13.4% of them do not take dairy product and 38.6% daily. The rest of the food consumption pregnancy is shown on table 2.

Table 2: Food consumption Frequency of the pregnant women

Variables	Frequency	Percentage (%)
Protein		
Daily	82	54.7
At least weekly	40	26.7
2 – 4 times monthly	28	18.6
Seldom /never	-	-
Total	150	100
Dairy product		
Daily	58	38.6
At least weekly	42	28.0
2-4 times monthly	30	20.0
Seldom/ever	20	13.4
Total	150	100
Roots and tubers		
Daily	42	28.0
At least weekly	54	36.0
2-4 times monthly	48	32.0
Seldom/never	6	4.0
Total	150	100
Fruits and vegetables		
Daily	99	66.0
At least weekly	26	17.4
2 -4 times monthly	26	17.4
Seldom /never	-	-
Total	150	100
Sweets		
Daily	50	33.3
At least weekly	48	32.0
2-4 times monthly	32	21.4
Seldom/never	20	13.3
Total	150	100

Table 3: shows the consumption patterns of the pregnant women. It was observed that 8.0% eat once a day which 60.0% eat thrice a day. In the case of breakfast, a total percentage of 5.4% eat breakfast daily. About 25.4% - 25.4% of the respondents eat outside their home daily.

Table 3: Consumption pattern of pregnant women

Variables	Frequency	Percentage (%)
How often do you in a day?		
Once	12	8.0
Twice	40	26.6
Thrice	90	60.0
Others	8	5.4
Total	150	100
How often do you eat breakfast?		
Daily	80	53.4
Weekly	55	36.6
Monthly	15	10.0
Total	150	100

Table 4 shows the food preferences of the pregnant women which indicated that 100% of them eat vegetables. The grains and cereals were the most (94.6%) consumed food. fruited pumpkin is the most preference vegetables followed by water leaf. It was also observed that the pregnant women prefer rice to other grains and cereals. It is surprising that about 20% consumed alcoholic beverages.

Table 4: Food preference of the pregnant women

Variables	Frequency	Percentage (%)
Which of this food (s) do you eat		
Vegetables	150	100
Grains and cereals	142	94.6
Fruits	137	91.3
Roots and tubers	135	90.0
Legumes	25	16.6
Nuts	30	20.0
Which of these vegetables do you prefer?		
Fluted pumpkin	125	88.3
Green leaf	75	50.0
Spinach	8	5.3
Garage	96	64.0
Water leaf	100	66.6
Tomato	89	59.3
Garden egg	75	50.0
Which of these grains and cereals do you prefers		
Rice	135	90.0
Wheat	66	44.0
Millet	23	15.3
Oat	50	33.3
Maize	95	63.3
Golden morn	70	46.6
Which of these fruits do you prefer?		
Paw-paw	103	68.6
Pineapple	93	62.0
Apple	60	40.0
Banana	84	56.0
Orange	110	73.3

Do you drink alcoholic beverages?

Yes	30	20.0
No	120	80.0
Which snacks do you prefer?		
Sweetened	95	63.4
Unsweetened	55	36.6
What factors affect your choices/preferences?		
Likeability	20	13.4
Availability	15	10.0
Affordability	33	22.0
Taste preference	25	16.0
Sensory restraint	-	-
Convenience	-	-
Cognitive restraint	-	-
Cultural familiarity	15	10.0
Seasonality	42	28.0
Total	150	100

Table 5 shows the types of food consumer by the pregnant women, where rice was the mostly (90.0%) consumed

foods, while majority (75.3%) consumed bean, coco-yam was the least (14.0%) consumed food.

Table 5: Type of food consumed by the pregnant women

Variables	Frequency	Percentage (%)
Which food(s) do you often consume?		
Rice	135	90.0
Beans	113	75.3
Noodles	42	28.0
Plantain	67	44.6
Spaghetic	84	56.0
Sed foods	98	65.3
Garri	58	36.6
Fufu	38	25.3
Amala	57	38.0

Yam	106	70.6
Cocoyam	21	14.0
Wheat	28	18.6
Millet	75	50.0
Potato	80	53.3
Coca flakes	33	22.0
Golden more	70	46.6
Akara	32	21.3
Moi-moi	44	29.3

Discussion

Nutritious diet is very essential for all human beings and its significance increases multiple folds during pregnancy period as it affects two lives: mother and child. A women's nutrition during pregnancy is very important to the health of the bay herself because the baby is growing fast and building tissues and growth. An under nourished mother will give birth to a small, less healthy baby which may also harm the mother. A pregnant woman should be well nourished especially at the age range of birth. Majority (45.9%) of the respondents were 19 -33 years. This agreed with 48% for rural and 65% for urban reported by Hossain *et al.*, (2013)^[8] in a study in Bangladesh. Maternal age is an important determinant of nutritional status for pregnant women.

The education level of the study participants had an important effect on their nutritional status during pregnancy. The participants were highly educated (73.0%) literacy rate. The educational level also reflected on their food choices. Various studies carried out in different parts of the world have shown relationship between socio-economic status and demographic characteristics (Alice *et al.*, 2014) and Savy *et al.*, 2008)^[10].

Majority of them knew that not just eating three times (60.0%) a day, but eating healthy and nutritious food along with breakfast (63.4%) helps the growth of the urban fetus and gives them strength as an expecting mother. Majority (100%) of the pregnant women prefer vegetables to other foods, although grains and cereals are been consumed by them along with fruits and sweetened snacks.

Conclusion

Data obtained from the present study showed that pregnant women were knowledgeable about variety of foods, like protein, dairy products, roots and tubers, fruits and vegetables. Their knowledge could be related to their educational status. The women were highly educated based on the study. about (48.6) of the respondents had tertiary education. The study reviewed that 8% respondents ate once a day, while 60.0% at thrice a day. It was also seen that 100% of the consumed vegetables. Variety of food were eaten by the pregnant women. In conclusion, the pregnant women had good choice in their eating preferences.

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