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Investigation Into Factors Associated With The Dietary Intake of Pregnant Women and Nursing Mothers In Ibadan Southwest Local Governmen

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ABSTRACT

In order to maintain the health and wellbeing of both the mother and the unborn child, proper diet is absolutely essential during pregnancy and nursing. However, a number of variables can affect a pregnant woman's and a nursing mother's dietary consumption, which may have an impact on their nutritional status. Therefore, this study aimed to determine the factors influencing dietary intake of pregnant women and nursing mothers in Ibadan southwest local government. 365 responders in total were recruited. A cross-sectional study design was used. A semi- Structured questionnaires were used to gather information on food habits, body measurements, household factors, environmental factors, cultural attitudes, and nutrition knowledge. The frequencies, means, and proportions of the relevant variables were presented. The mean age of the respondents was 31.08±6.72 years, with the majority falling within the age range of 35-39 years. Most respondents were married (87.4%) and had tertiary education (59.2%). The findings revealed that 55.3% of the respondents did not take dietary supplements during pregnancy/lactation. The main meals consumed were bread and stew/egg for breakfast, snacks and soft drinks for lunch, and swallow and soup for dinner. While the majority of the respondents consumed essential food groups, 34.5% exhibited poor dietary practices. Furthermore, a significant proportion of the respondents were classified as overweight (29.6%) or obese (35.6%). Environmental factors, such as the prices of foodstuff and cultural beliefs, living with a partner (COR = 6.503; AOR = 6.487), being self-employed (AOR - 0.549), being unemployed (AOR = 0.228) and earning above N75,000 (COR =6.109, AOR = 8.583) influence the dietary patterns of the respondents. The study emphasizes the necessity for pregnant women and nursing moms who visit PHC centers to have better eating habits and nutritional awareness. The necessity of a balanced diet, which includes the consumption of fruits, vegetables, and protein sources, should be the main focus of nutrition education initiatives aimed towards these groups. Additionally, steps should be taken to remove cultural prejudices and environmental obstacles that could prevent healthy dietary intake. Healthcare practitioners can help to improve the health of expectant mothers, nursing mothers, and their infants by addressing these variables.

KEYWORD: Dietary Intake, Pregnant Women, Lactating Mothers

Word Count: 326

INTRODUCTION

The stages of a woman's life during pregnancy and breastfeeding are significant. A woman's body goes through several changes during these periods, including nutritional requirements modifications. Pregnant women and nursing mothers need extra nutrients in their diets to support the fetus' and baby's growth and development[1]. But a variety of factors, including as cultural views, access to healthcare and education, and socioeconomic position, can affect nutritional intake in these people.[2].

Nigeria, being one of the most populous countries in Africa, faces significant challenges in addressing the nutritional needs of its population, particularly pregnant women and nursing mothers. In Ibadan Southwest Local Government, a region in Nigeria, there is a need to understand the factors that influence the dietary intake of pregnant women and nursing mothers to develop targeted interventions that can improve their nutritional status and ultimately enhance the health outcomes of mothers and their infants.[3]Additionally, poverty and limited food options can make it difficult for these women to afford

and obtain the necessary nutrients for themselves and their infants[3]. Cultural beliefs and practices also play a role in the dietary intake of pregnant women and nursing mothers in Ibadan's southwest local government[3]. For example, some cultural beliefs may dictate that certain foods are taboo during pregnancy or breastfeeding, while others may prescribe specific foods or rituals to support the health of the mother and child. These beliefs and practices can either support or hinder adequate dietary intake in these individuals[3].

Overall, the dietary intake of pregnant women and nursing mothers in Ibadan southwest local government is influenced by a range of factors, including access to healthcare and education, socioeconomic status, and cultural beliefs and practices. Understanding these factors is crucial for developing interventions and support systems to improve the dietary intake of these individuals and promote the health of both mothers and infants[4].

Due to a variety of factors, including socioeconomic status, cultural beliefs, nutritional knowledge, availability and accessibility of nutritious foods, food preferences, pregnancy-related symptoms, a lack of social support, and maternal health conditions, pregnant women and nursing mothers in the Ibadan Southwest Local Government Area face numerous obstacles to achieving optimal nutrition.[5]The inability to create efficient interventions to enhance maternal and child health outcomes is due to the paucity of information on the precise variables that affect pregnant women's and nursing mothers' dietary consumption in this area. To create targeted interventions to enhance the nutritional status and health outcomes of pregnant women and nursing mothers in the Ibadan southwest local government area, it is necessary to research the factors that affect their dietary intake. The study can assist pinpoint the causes of inadequate food intake in expectant and nursing moms, which can have a detrimental effect on both mothers' and their children's health. The development of efficient interventions to enhance mother and child health can be aided by an understanding of these aspects. It can also shed light on how much pregnant women and nursing moms in Ibadan Southwest Local Government are aware of the value of a balanced diet throughout pregnancy and lactation.

MAIN OBJECTIVE OF THE STUDY

The main objective is to examine the factors associated with Dietary the Intake of Pregnant women and Nursing mothers in the Ibadan southwest Local Government Area.

SPECIFIC OBJECTIVES OF THE STUDY

1. To Identify the dietary practices of pregnant women and nursing mothers in Ibadan Southwest Local Government Area
2. To determine the nutritional status of pregnant women and nursing mothers in Ibadan South West Local Government Area
3. To identify the factors influencing the dietary intake of pregnant women and nursing mothers in Ibadan Southwest Local Government Area
4. To identify the relationship between the identified factors and the dietary intake of pregnant women and nursing mothers.

RESEARCH QUESTION

1. What are the dietary practices of pregnant women and nursing mothers in the Ibadan Southwest Local Government Area?

2. What is the nutritional status of pregnant women and nursing mothers in the Ibadan Southwest Local Government Area?
3. What factors influence the dietary intake of pregnant women and nursing mothers in the Ibadan Southwest Local Government Area?
4. What is the relationship between the identified factors and the dietary intake of pregnant women and nursing mothers in the Ibadan Southwest Local Government Area?

HYPOTHESIS

H0: There is no significant relationship between the dietary practices of pregnant women and nursing mothers and their nutritional status in the Ibadan Southwest LGA.

H0: Factors such as socioeconomic status, educational level, cultural beliefs, and access to healthcare do not significantly influence the dietary intake of pregnant women and nursing mothers in the Ibadan Southwest LGA.

MATERIALS AND METHODS

RESEARCH DESIGN

This study was conducted using a cross-sectional survey design, which can reveal information about the prevalence of dietary patterns and the variables linked to them.

STUDY AREA

Ibadan Southwest Local Government is located in the southwestern part of Nigeria, in Oyo State. It is one of the 33 local government areas in the state and has a population of about 250,000 people. The local government area is predominantly urban, with a few rural areas.

The study area is characterized by a tropical climate with distinct rainy and dry seasons. The rainy season usually starts from April and lasts until October, while the dry season occurs from November to March. The area is also known for its rich cultural heritage and diverse ethnic groups. Economically, the area is predominantly agrarian, with farming being the primary occupation of the inhabitants. The area is also home to a number of small and medium-sized businesses, including food processing and trading. The healthcare system in the study area is provided by both private and public health facilities, including primary health care centers and general hospitals. However, access to quality healthcare services may be limited for some members of the population due to socio-economic factors. Ibadan Southwest Local Government has a number of health facilities, including primary health care centers and general hospitals, which provide health care services to pregnant women and nursing mothers in the area. The local government area also has markets and food vendors where various types of foods, including locally grown fruits and vegetables, are sold.

STUDY POPULATION

The study population for Factors influencing Dietary Intake of Pregnant Women and Nursing Mothers in Ibadan Southwest Local Government were the pregnant women and nursing mothers who are residents of the local government area and within the age range of 20 to 50 years.

SAMPLING TECHNIQUES

In the case of this study, the research was conducted in the Ibadan Southwest Local Government Area (LGA), which comprises 12 wards. Each ward has a health center, with a total of 12 health centers in the LGA. Among these health centers, only three offers both antenatal care and routine immunization

services, while the remaining nine centers provide only routine immunization services. To ensure representative sampling and efficient data collection, a multistage sampling technique was adopted

SAMPLE SIZE DETERMINATION.

The desired sample size for the study was determined using statistical formulae, such as the Cochran formula, which takes into account the population size, the desired level of precision, and the expected proportion of the population with the characteristic of interest. Therefore, a sample size of 385 pregnant women and nursing mothers were selected from the six selected health centers using the multi-stage sampling technique described above.

METHOD OF DATA ANALYSIS

The questionnaire was administered in person to the participants. Data collected was analyzed using statistical package for social science. Data were presented using descriptive statistics and regression analysis to determine the factors that influencing dietary intake.

ETHICAL CONSIDERATION

There are several ethical considerations that need to be taken into account when conducting the study

RESULTS

Table 4.1: Sociodemographic characteristics of the respondent

Variables	Frequency	Per cent (%)
Age		
20 - 24 years	64	17.5
25 - 29 years	93	25.5
30 - 34 years	81	22.2
35 - 39 years	96	26.3
40 years and above	31	8.5
Marital status		
Married	319	87.4
Single	27	7.4
Divorced	19	5.2
Level of Education	50	14.7
Primary Education	8	2.2

Secondary Education	141	38.6
Tertiary Education	216	59.2
Occupation		
Employed	153	41.9
Self-Employed	129	35.3
Unemployed	30	8.2
Student	53	14.5
Monthly Income		
N25,000 and below	37	10.1
Between N25,000 and N50,000	184	50.4
Between N50,000 and N75,000	66	18.1
Between N75,000 and N100,000	31	8.5
Between N100,000 and N125,000	29	7.9
Between N125,000 and N150,000	18	4.9

*Mean age = 31.08±6.72 years, Mean Income = N62,221.92±34,143.16

A total of three hundred and sixty-five (365) respondents were recruited into this study, the mean age of respondents was 31.08±6.72 years, with majority of the respondents (26.3%) in the age range of 35 - 39 years. Most of the respondents (87.4%) were married and more than half (59.2%) had tertiary education. The majority of the respondents (41.9%) were employed, 35.3% were self-employed, 8.2% were unemployed and 14.5 were students. Mean income of respondents was N62,221.92±34,143.16 with majority (50.4%) earning between N25,000 and N50,000 naira (Table 4.1)

Research Questions

Research question one sought to find out the dietary practices of pregnant women and nursing mothers in the Ibadan Southwest LGA

Table 4.2 Dietary practices of pregnant women and nursing mothers

Variables	Frequency	Per cent (%)
Dietary supplement taken during pregnancy/lactation		
Vitamin B complex and Folic acid	106	29.0
Pregnacare	57	15.6
No dietary supplements	202	55.3
How many meals do you eat in a day		
1-2 meals	14	3.8
3 meals	185	50.7
more than 3 meals	166	45.5
What type of food do you usually eat for breakfast		
Bread and stew/egg	82	22.5
Yam/potato and egg/sauce/stew	43	11.8
Beans	13	3.6
Pap and akara	46	12.6
Jollof rice/rice and stew	73	20.0
Swallow and soup	28	7.7
Snacks	10	2.7
Fruits	10	2.7
Goldenmorn & Milk	42	11.5
Oats and milk	8	2.2

Anything	10	2.7
What type of food do you usually eat for lunch		
Rice and beans with stew	77	21.1
Swallow and Soup	92	25.2
Snacks and soft drinks	139	38.1
Yam and egg	13	3.6
Rice and vegetables	9	2.5
Pap and milk	17	4.7
Beans	8	2.2
Anything	10	2.7
What type of food do you usually eat for dinner		
Swallow & Soup with beef	198	54.2
Beans and bread	21	5.8
Rice and beans with stew	88	24.1
Fruits	31	8.5
Eko and efo	17	4.7
Anything	10	2.7
Do you consume snacks in between meals?		
Occasionally	192	52.6

Once a day	154	42.2
More than once a day	19	5.2
What are the types of food that you eat?		
Carbohydrates	365	100.0
Proteins	365	100.0
Vegetables	365	100.0
Fruits	365	100.0
Dairy Products	365	100.0
Others (please specify) *	44	12.0
How often do you consume meat and meat products in a week		
Rarely	7	1.9
Occasionally	33	9.0
Once a day	232	63.6
More than once a day	93	25.5
How often do you consume legumes, fruits and vegetables in a week		
Occasionally	43	11.8
Once a day	298	81.6
More than once a day	24	6.6

*Others = Snacks

The table above reveals that the majority of the respondents (55.3%) do not take dietary supplements during pregnancy/lactation, 29.0% used vitamin B complex alongside folic acid while 15.6% used pregnacare. More than half (50.7%) ate three meals daily, the most common meal for breakfast was bread and stew/egg (22.5%), for lunch was snacks and soft drinks (38.1%) and for dinner was swallow and soup (54.2%). The majority of the respondents (52.6%) indicated they occasionally consumed snacks in between meals. All respondents (100.0%) indicated they ate carbohydrates, proteins, vegetables, fruits and dairy products while 12.0% indicated others (snacks). The majority of the respondents (63.6%) indicated they consumed meat and meat products once daily while most (81.6%) consumed legumes, fruits and vegetables once daily.
(Table 4.2).

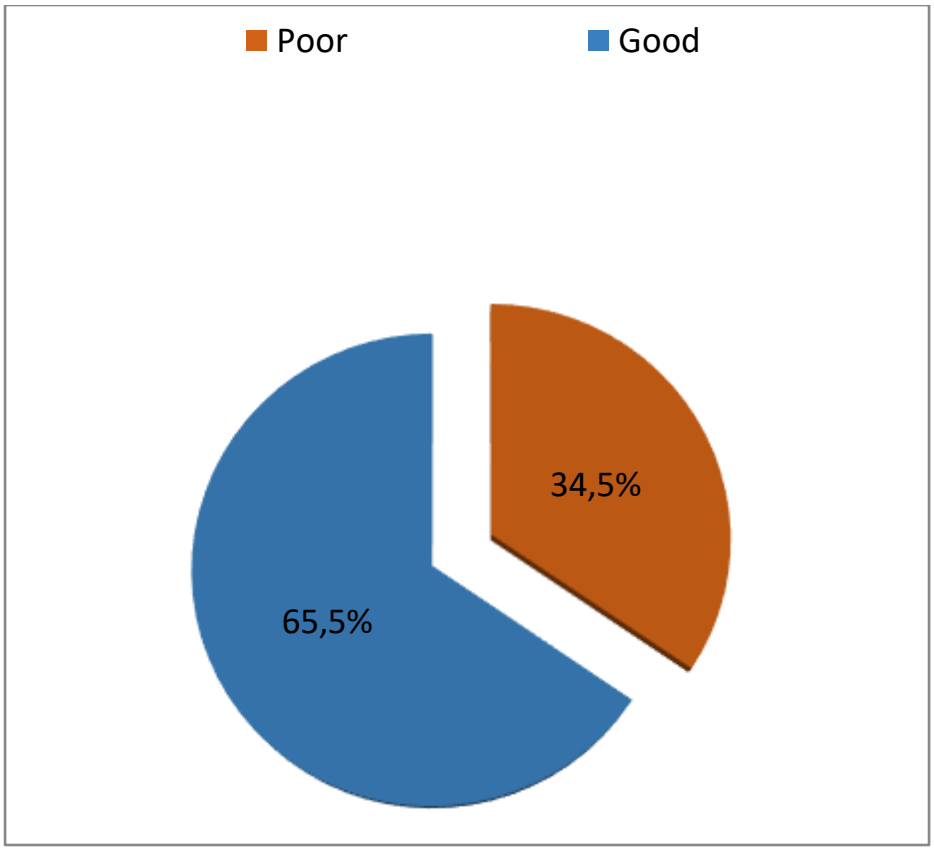

Figure 4.1 Dietary Practices of pregnant women and nursing mothers

Respondents' dietary practices were measured on a 14-item scale with a mean score of 13.98±1.311. Majority of the respondents (65.5%) had good dietary practices, however, 34.5% of respondents had poor dietary practices.

Research question two sought to find out the nutritional status of pregnant women and nursing mothers in Ibadan South West LGA

Table 4.3 Nutritional Status of pregnant women and nursing mothers

Variables	Min	Max	Mean	SD
Height (cm)	125	178	154.05	14.48
Weight (kg)	33	108	67.45	12.63
Waist circumference (cm)	20	48	37.16	7.73
Hip circumference (cm)	13	53	32.73	8.07
Mid upper-arm circumference (cm)	8.0	21.0	12.75	2.96

The mean height of respondents was 154 ±14.48cm, the mean weight was 67.45±12.63kg, the mean waist circumference of respondents was 37.16±7.73cm, the hip circumference was 32.73±8.07cm and the mid-upper-arm circumference was 12.75±2.96cm. Respondents' Body Mass Index (BMI) was calculated using their weight (kg) and height (m).

BMI = Weight in kilograms/ (height in meters) ,BMI was categorized as underweight (BMI ≤ 18.5), normal (BMI = 18.6–25.0), overweight (BMI = 25.1–30.0), and obese (BMI ≥ 30.1). The majority of the respondents (35.6%) were obese, 29.6% were overweight, 30.1% were normal and 4.7% were underweight.

Research question three sought to find out the factors that influence the dietary intake of pregnant women and nursing mothers in the Ibadan Southwest LGA

Table 4.4a Environmental Factors

Variables	Frequency	Per cent (%)
How many people do you have living in your home		
≤ four people	223	61.1
≥ five people	142	38.9
Do you have access to clean water		
Yes	339	92.9
No	8	2.2
Not sure	18	4.9

Are there any environmental factors that affect your dietary habits during pregnancy/lactation		
Yes	99	27.1
No	214	58.6
Not sure	52	14.2
If yes (specify) (n =99)		
Prices of foodstuff	89	89.9
Market is far	10	10.1
Access to a refrigerator		
Yes	275	75.3
No	90	24.7
Access to a cooking stove		
Yes	365	100.0
Cultural beliefs affect my dietary choices during breastfeeding/lactation		
Yes	154	42.2
No	139	38.1
Not sure	72	19.7
How does the environment affect your dietary choices during pregnancy/breastfeeding		
Availability of healthy foods	232	63.6

Availability of unhealthy foods	9	2.5
Accessibility to healthy foods	115	31.5
Accessibility to unhealthy foods	9	2.5

The majority of the respondents (61.1%) indicated that between two and four people were members of their household. Almost all respondents (92.9%) have access to clean water. Few of the respondents (27.1%) indicated there were environmental factors that affected their dietary habits during pregnancy/lactation of which 89.9% indicated it was the prices of foodstuff and 10.1% indicated the market was too far (n = 99). About three-quarters (75.3%) of the respondents had access to a refrigerator while all respondents (100.0%) had access to a cooking stove. The majority of the respondents (42.2%) indicated that cultural beliefs affected their dietary choices during breastfeeding/lactation. The majority of respondents the environment affects their dietary choices during pregnancy/breastfeeding by availability of healthy foods (63.6%) and accessibility to healthy foods (31.5%) (Table 4.4a).

Table 4.4b Taboos On Certain Foods

Variables	**Frequency**	**Per cent (%)**
Do you have cultural taboos on certain foods during pregnancy and breastfeeding		
Yes	74	20.3
No	245	67.1
Not sure	46	12.6
If yes, which foods are prohibited? (Select all that apply)		
Spicy foods	17	4.7
Salty foods	74	20.3
Certain types of meat		
Bushmeat	31	8.5
Snail	23	6.3
Goat meat	20	5.5

Seafoods		
Cat fish	32	8.8
Crab	9	2.5
Prawn	20	5.5
Others		
Draw soups (okro etc.)	45	12.3

Few of the respondents (20.3%) indicated they had cultural taboos on certain foods they could eat during pregnancy and breastfeeding, when asked for foods that were prohibited 4.7% indicated spicy food, 20.3% indicated salty foods, 8.5% indicated bushmeat, 6.3% indicated snail, 5.5% indicated goat meat, 8.8% indicated catfish, 2.5% indicated crab and 5.5% indicated prawn. 12.3% also indicated that draw soups like okro was a taboo during the period of pregnancy and breastfeeding.

Table 4.4c Traditional Beliefs About Nutrition

Variables	**Frequency**	**Per cent (%)**
Certain foods can increase breastmilk production		
Yes	173	47.4
No	142	38.9
Not sure	50	13.7
Examples of such food are		
Pap and milk	143	82.7
Custard and milk	20	11.6
Cookies	10	5.8
Certain foods promote the growth of the fetus		
Yes	167	45.8
No	125	34.2
Not sure	73	20.0

Examples of such food are		
Fruits and Vegetable	109	65.3
Protein	58	34.7

Less than half (47.4%) of the respondents indicated that certain foods could increase breast milk production of which 82.7% indicated pap and milk, 11.6% said custard and milk and 5.8% indicated cookies (n = 173). Less than half of the respondents (45.8%) also indicated that certain foods promote the growth of the fetus of which 65.3% indicated fruits and vegetables and 34.7% indicating protein (n = 167).

Table 4.4d Beliefs About Body Image

Variables	Frequency	Per cent (%)
I feel pressure to maintain a certain body image during pregnancy and breastfeeding		
Yes	9	2.5
No	310	84.9
Not sure	46	12.6
I have restricted my food intake or used weight loss diets during pregnancy or breastfeeding to maintain a certain body image		
Yes	9	2.5
No	331	90.7
Not sure	25	6.8

Very few respondents (2.5%) indicated they felt pressure to maintain a certain body image during pregnancy and breast feeding while 12.6% said they were not sure, 2.5% of respondents also indicated they had restricted their food intake or used weight loss diets during pregnancy/breastfeeding to maintain a certain body image while 6.8% were not sure.

Table 4.4e Fasting or Dietary Restrictions

Variables	Frequency	Percent (%)
My religion/culture involves fasting/dietary restrictions during pregnancy/breastfeeding		
Yes	29	7.9

No	312	85.5
Not sure	24	6.6
If yes, have you experienced any difficulties with meeting your nutritional needs during these periods		
Yes	18	4.9
No	314	86.0
Not sure	33	9.0

Very few respondents (7.9%) indicated their religion/culture involves fasting/dietary restrictions during pregnancy/breastfeeding while 6.6% were not sure, 4.9% of respondents indicated they had experienced difficulties with meeting their nutritional needs during those periods (fasting/dietary restrictions) while 9.0% indicated they were not sure.

Table 4.4f Knowledge, Attitude and Belief

Variables	Frequency	Per cent (%)
Nutrition is important during pregnancy and breastfeeding		
Yes	271	74.2
No	44	12.1
Not sure	50	13.7
How important is it to consume a balanced diet during pregnancy and breastfeeding		
Very important	94	25.8
Somewhat important	271	74.2
I have received nutrition education during pregnancy/breastfeeding		
Yes	282	77.3
No	83	22.7
I am confident in my ability to make healthy food choices during pregnancy/lactation		

Very confident	65	17.8
Somewhat confident	252	69.0
Not so confident	48	13.2
Main sources of Nutrition information during pregnancy and breastfeeding		
Healthcare professionals	268	73.4
Family and friends	20	5.5
None (No prior information on Nutrition during pregnancy/breastfeeding)	68	18.6

The majority of the respondents (74.2%) indicated nutrition was important during pregnancy and breastfeeding, most of the respondents (74.2%) indicated consuming a balanced diet during pregnancy and breastfeeding was somewhat important while 25.8% indicated it was very important. More than three-quarters (77.3%) of the respondents have received nutrition education during pregnancy/breastfeeding. The majority of the respondents (69.0%) indicated they were confident in their ability to make healthy food choices during pregnancy/lactation. The main source of nutrition information during pregnancy and breastfeeding were health care professionals (73.4%), however, it is noteworthy that 18.6%) indicated they had no prior information on Nutrition during pregnancy/breastfeeding (Table 4.4f).

Hypothesis Testing

$H_0$1- There is no significant relationship between the dietary practices of pregnant women and nursing mothers and their nutritional status in the Ibadan Southwest LGA.

Table 4.5 Bivariate analysis of dietary practice and nutritional status of pregnant women/nursing mothers

	Dietary Score			
Variables	**Poor**	**Good**	**X^2 value**	**P-value**
Underweight	0	17	19.126	<0.001*
Normal	28	82		
Overweight	40	68		
Obese	58	72		

*Statistically significant at p-value ≤0.05

Table 4.5 above reveals a significant association between the dietary practice of the respondents and their nutritional status. Therefore, we reject the null hypothesis that says there is no significant relationship/association between the dietary practices of pregnant women and nursing mothers and their nutritional status.

Research question four sought to find out the relationship between the identified factors and the dietary intake of pregnant women and nursing mothers in the Ibadan Southwest LGA

$H_0$2- Factors such as socioeconomic status does not significantly influence the dietary intake of pregnant women and nursing mothers in the Ibadan Southwest LGA

Table 4.6 Factors influencing dietary practice and nutritional status of pregnant women/nursing mothers

Variable	COR	95% CI	P-value	AOR	95% CI	P-value
Age						
30 years and below	1					
Above 30 years	0.661	.428, 1.020	0.061	0.426	.248, .733	0.002*
Marital status						
Living with partner	1					
Not living with partner	6.503	2.275,18.585	<0.001*	6.487	2.047, 20.558	0.001*
Occupation						
Employed	1					
Self-Employed	1.503	.766, 2.952	0.236	0.549	.303, .995	0.048*
Unemployed	.650	.334, 1.265	.204	0.228	.080, .650	.006*
Student	.771	.306, 1.947	.583	0.673	.308, 1.470	0.320
Monthly Income						
N75,000 and below	1					
More than N75,000	6.109	2.833, 13.173	<0.001*	8.583	3.755, 19.618	<0.001*

At AOR, respondents aged 30 years were 0.426 times less likely to have good dietary practices compared to those below 30 years. This result is statistically significant at the 5% significance level ($p < 0.05$).
At COR, respondents who are not living with a partner are 6.503 times more likely to have good dietary practices compared to those living with a partner (p-value < 0.001). When adjusted for other variables in the model, respondents who are not living with a partner are 6.487 times as likely to have good dietary practices compared to those living with a partner (p-value = 0.001).
When adjusted for other variables in the model, self-employed respondents are 0.549 times as likely to have good dietary practices compared to the employed respondent's group (p-value =0.048), Likewise, respondents who are unemployed are 0.228 times less likely to have good dietary practices compared to the reference group (p-value = 0.006).
At COR, respondents earning above N75,000 are 6.109 times more likely to have good dietary practices compared to those earning below or equal to N75,000, however, after adjusting for other variables in the model, respondents earning above N75,000 are 8.583 times more likely to have good dietary practices compared to those earning below or equal to N75,000 (p-value < 0.001).

Discussion

Socio-Demographics of Respondents

The study included a total of 365 respondents with a mean age of 31.08±6.72 years. The majority of the respondents (26.3%) fell within the age range of 35-39 years. Regarding marital status, a significant proportion of the respondents (87.4%) were married. In terms of education, more than half of the respondents (59.2%) had tertiary education, indicating a relatively educated sample. Employment status varied, with the majority (41.9%) being employed, followed by self-employed (35.3%), unemployed (8.2%), and students (14.5%). The mean income of the respondents was N62,221.92±34,143.16, with the majority (50.4%) earning between N25,000 and N50,000 naira. The predominance of married respondents and those with tertiary education suggests a level of maturity and education that may influence their dietary practices. Additionally, income level can impact access to and affordability of healthy food choices, which may influence dietary practices and nutritional status. Findings from this study are similar to Adeoye *et al*[1] study in Ibadan which revealed that most of the respondents (94.1%) were married, and employed (89.2%). However, in this study majority of the respondents earned less than N20,000 a month (33.4%).
The influence of factors such as socioeconomic status on the dietary intake of pregnant women and nursing mothers was analyzed and findings revealed that respondents aged 30 years or older were 0.426 times less likely to have good dietary practices compared to those below 30 years suggests that younger age may be associated with better dietary choices these findings are however not in consonance with Jarman *et al*[2] whose findings indicate otherwise as younger respondents adhered more to the ‘Snacks, sandwiches, sweets and soft drinks dietary pattern. Healthcare professionals should consider age-related dietary preferences and provide tailored nutritional guidance to different age groups.
Respondents who were not living with a partner were 6.503 times more likely to have good dietary practices compared to those living with a partner. This indicates that marital status plays a role in dietary choices. Single or unmarried pregnant women and nursing mothers may have more control over their

food choices, allowing for healthier practices. Understanding the influence of marital status on dietary habits can help in designing targeted interventions for specific subgroups.

Self-employed respondents were 0.549 times as likely to have good dietary practices compared to the employed group, while unemployed respondents were 0.228 times less likely to have good dietary practices. This suggests that employment status can impact dietary intake. Unemployed individuals may face financial constraints that affect their ability to afford nutritious foods. Healthcare providers should address these barriers and offer support to vulnerable populations in maintaining healthy dietary practices.

Respondents earning above N75,000 were 8.583 times more likely to have good dietary practices compared to those earning below or equal to N75,000. This highlights the role of income in influencing dietary choices. Higher-income levels may facilitate access to a variety of nutrient-rich foods. Policymakers should consider strategies to improve income levels and reduce income disparities to promote better nutrition for pregnant women and nursing mothers.

Dietary Practices of Pregnant Women and Nursing Mother

Dietary practices play a crucial role in the health and well-being of pregnant women and nursing mothers. In this study, a significant proportion of the respondents (55.3%) reported not taking dietary supplements during pregnancy or lactation, this low prevalence of dietary supplement use suggests a potential gap in meeting nutrient requirements during pregnancy and lactation. Among those who used supplements, 29.0% used vitamin B complex alongside folic acid, while 15.6% used pregnacare. The majority of the respondents reported consuming three meals daily, with specific food choices for each meal. The most common breakfast choice was bread and stew/egg (22.5%), snacks and soft drinks were popular for lunch (38.1%), and swallow and soup were commonly consumed for dinner (54.2%), these findings are not in consonance with Adeoye et al[1] and Olatona *et al*[3] whose study revealed that White rice was the most frequently consumed meal among the study participants (45.5%) and (45.4%) respectively. More than half of the respondents (52.6%) indicated occasionally consuming snacks between meals. All respondents reported consuming essential food groups such as carbohydrates, proteins, vegetables, fruits, and dairy products. Meat and meat products were consumed once daily by the majority of respondents (63.6%) which is similar to Adeoye *et al*[1] and Olatona *et al*[3] whose study whose findings reveal that the commonest sources of animal protein were red meat (46.7%) and (20.3%) respectively. Legumes, fruits, and vegetables were consumed once daily by most respondents (81.6%), this, however, is not in consonance with Adeoye *et al*[1] as legumes were consumed mostly on a weekly basis, 9.1% daily & 68.7% weekly. The overall mean score for dietary practices was 13.98±1.311, indicating generally good dietary practices among the participants. However, 34.5% of the respondents had poor dietary practices. These findings are not in alignment with Diddana[5] whose study revealed that 45.2% of pregnant women had good dietary practices while 54.8% had poor dietary practice. The prevalence of good dietary practices indicates a general awareness of the importance of a balanced diet among the participants. However, the proportion of respondents with poor dietary practices highlights the need for targeted interventions to improve knowledge and promote healthier dietary behaviours.

Nutritional Status of Respondents

The study assessed the nutritional status of the participants by measuring various anthropometric parameters. The mean height of the respondents was 154±14.48cm, and the mean weight was

67.45±12.63kg. The mean waist circumference was 37.16±7.73cm, the hip circumference was 32.73±8.07cm, and the mid-upper-arm circumference was 12.75±2.96cm. Body Mass Index (BMI) was calculated using weight and height, and respondents were categorized as underweight, normal weight, overweight, or obese. The majority of the respondents (35.6%) were classified as obese, 29.6% were overweight, 30.1% were normal weight, and 4.7% were underweight. The high prevalence of obesity among the respondents is a concerning finding, as obesity during pregnancy and lactation can increase the risk of various maternal and fetal complications. The overweight and obesity rates indicate the need for interventions that address healthy weight management and promote physical activity among pregnant women and nursing mothers. Additionally, the prevalence of underweight individuals warrants attention to ensure adequate nutrition and healthy weight gain during pregnancy and lactation. Findings from this study are similar to Teixeira *et al*[4] whose study revealed that the majority of the respondents were overweight/obese (51.0%), however it was not in consonance with Ali *et al*[6] whose findings revealed that 47% of pregnant women had normal pre-gestational BMI while 22% were overweight, 17% obese, and only 12% of pregnant women were underweight.

The chi-square test revealed a significant association between the dietary practices of the respondents and their nutritional status. The finding of a significant association between dietary practices and nutritional status highlights the importance of focusing on dietary interventions for pregnant women and nursing mothers. Improving dietary practices can have a positive impact on their nutritional status, which is crucial for their own health as well as the health and development of their babies.

Factors that Influence the dietary intake of pregnant women and nursing mothers

Environmental Factors:

The majority of the respondents (61.1%) reported having between two and four people in their household. Access to clean water was high, with 92.9% of respondents indicating such access. Among the respondents, 27.1% reported that environmental factors affected their dietary habits during pregnancy or lactation. Of those who experienced environmental factors, 89.9% mentioned the prices of foodstuff as a significant influence, while 10.1% stated that the distance to the market was a barrier. Access to a refrigerator was reported by 75.3% of respondents, and all respondents had access to a cooking stove. Cultural beliefs were reported to influence dietary choices during breastfeeding/lactation by 42.2% of respondents. In terms of how the environment affected dietary choices, 63.6% mentioned the availability of healthy foods, and 31.5% mentioned accessibility to healthy foods.

The environmental factors highlighted in this study play a role in shaping the dietary intake of pregnant women and nursing mothers. The high access to clean water is a positive aspect, as it contributes to maintaining hygiene and food safety. However, the influence of food prices on dietary habits suggests that affordability may be a significant concern for this population. Additionally, the distance to the market may hinder access to fresh and nutritious food choices. The availability of a refrigerator and cooking stove indicates that storage and preparation facilities are relatively accessible. However, cultural beliefs and norms have a notable impact on dietary choices, which calls for culturally sensitive interventions to address these influences.

Taboos on Certain Foods:

A minority of respondents (20.3%) reported having cultural taboos on certain foods during pregnancy and breastfeeding. The prohibited foods mentioned were spicy food (4.7%), salty foods (20.3%),

bushmeat (8.5%), snail (6.3%), goat meat (5.5%), catfish (8.8%), crab (2.5%), and prawn (5.5%). Furthermore, 12.3% of respondents indicated that draw soups like okro were considered taboo during pregnancy and breastfeeding. Findings from this study are similar to the findings of Ekwochi *et al*[7] whose study revealed that 37 % of respondents avoided some foods in pregnancy due to food taboos with Snails and bush meat being the most commonly avoided food in pregnancy. It was also similar to Tela *et al*[8] whose findings revealed that around 12% of the pregnant women avoided at least one type of food during their current pregnancy for one or more reasons. The most common reasons given for the avoidances were that the foods were (mistakenly) believed to cause: abortion; abdominal cramps in the mother and newborn; prolonged labor; or coating of the fetus's body. Cultural taboos and food restrictions can significantly impact the dietary choices and nutrient intake of pregnant women and nursing mothers. The identified food taboos suggest a preference for avoiding certain types of food due to cultural beliefs.

Traditional Beliefs About Nutrition:

Less than half of the respondents (47.4%) believed that certain foods could increase breast milk production. The foods mentioned were pap and milk (82.7%), custard and milk (11.6%), and cookies (5.8%). Regarding foods that promote fetal growth, 45.8% of respondents believed in their efficacy, with fruits and vegetables (65.3%) and protein (34.7%) being the specific food groups mentioned.

Traditional beliefs about nutrition can influence dietary choices and perceptions of food's impact on breastfeeding and fetal growth. The identified foods believed to increase breast milk production align with traditional knowledge and practices. Healthcare professionals can leverage these beliefs by providing evidence-based information on the benefits of certain foods and their impact on lactation and fetal growth. By combining traditional knowledge with accurate nutritional education, it is possible to promote healthier dietary choices during pregnancy and breastfeeding.

Beliefs About Body Image:

A small percentage of respondents (2.5%) reported feeling pressure to maintain a certain body image during pregnancy and breastfeeding, while 12.6% were unsure. A minority of respondents (2.5%) indicated that they had restricted their food intake or used weight loss diets during pregnancy/breastfeeding to maintain a specific body image, while 6.8% were unsure.

The low percentage of respondents feeling pressure to maintain a specific body image during pregnancy and breastfeeding is encouraging, as it suggests that body image concerns may not be a significant issue in this population.

Fasting or Dietary Restrictions:

A small proportion of respondents (7.9%) reported that their religion/culture involved fasting or dietary restrictions during pregnancy/breastfeeding, while 6.6% were unsure. Some respondents (4.9%) experienced difficulties meeting their nutritional needs during fasting or dietary restrictions, with 9.0% being unsure. Religious and cultural practices involving fasting or dietary restrictions may pose challenges in meeting the nutritional needs of pregnant women and nursing mothers. It is essential for healthcare professionals to have an understanding of these practices and work collaboratively with individuals to ensure appropriate nutrient intake during periods of fasting or dietary restrictions. Nutrition education that addresses the specific dietary requirements during fasting or dietary restrictions can help mitigate any potential nutritional deficiencies.

Knowledge, Attitude, and Belief:

The majority of respondents (74.2%) recognized the importance of nutrition during pregnancy and breastfeeding. Consuming a balanced diet during this period was considered somewhat important by most respondents (74.2%), while 25.8% deemed it very important. A significant proportion (77.3%) had received nutrition education during pregnancy/breastfeeding. The main source of nutrition information during this period was health care professionals (73.4%), although a notable percentage (18.6%) indicated a lack of prior information on nutrition during pregnancy/breastfeeding.

The high recognition of the importance of nutrition during pregnancy and breastfeeding is a positive finding. However, the presence of respondents who lacked prior information on nutrition emphasizes the need for improved dissemination of evidence-based information to pregnant women and nursing mothers.

CONCLUSION AND RECOMMENDATION

Conclusion

The research's conclusions emphasize crucial aspects of nutritional intake among expectant mothers in the Ibadan Southwest LGA. The survey found that most respondents had healthy eating habits, but a sizable percentage also showed unhealthy habits. However, it is noteworthy that the majority of responders were overweight and obese. The necessity of keeping a healthy and balanced diet throughout pregnancy and lactation was highlighted by the discovery that the food habits of expectant mothers and nursing mothers were substantially associated with their nutritional status. Additionally, it was discovered that a number of sociodemographic characteristics, such as age, marital status, work status, and income, had an impact on this population's dietary preferences.

Recommendation

Based on the findings of this study, the following recommendations can be made to improve dietary intake among pregnant women in the Ibadan Southwest LGA:

1. There is a need to prioritize nutrition education for pregnant women and nursing mothers. Healthcare providers should offer comprehensive and tailored nutrition counseling sessions to enhance knowledge about healthy dietary practices during pregnancy and lactation. This education should cover the importance of consuming a balanced diet, including essential nutrients such as proteins, fruits, vegetables, and dairy products.
2. Efforts should be made to improve access to nutritious foods for pregnant women and nursing mothers, especially among those from lower socioeconomic backgrounds. This can be achieved through various strategies such as implementing subsidized food programs, promoting local markets with affordable produce, and enhancing the availability of nutrient-rich foods in healthcare facilities.

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