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Socio-cultural Factors Affecting Maternal Nutrition During Pregnancy in Awka South

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Abstract

This study investigated socio-cultural factors affecting maternal nutrition during pregnancy in Awka South LGA. The specific objectives examined the current situation of pregnant women, cultural practices affecting dietary choices of pregnant women, social factors and measures to improve the maternal nutrition of pregnant women. Three theories were reviewed namely: Social constraints theory, life course theory and health belief model. Subsequently, health belief model was adopted as the theoretical framework. The mixed methods research design and mixed sampling procedure were used in this study. The study sampled 204 persons aged 15-49 years living in Awka South LGA. The quantitative data (i.e., questionnaires) were analyzed using descriptive statistics such as frequency counts and simple percentages while the qualitative data (interview responses) collected in the field were analyzed using the thematic method of data analysis. Two hypotheses were tested using Chi–square (x) test statistics and results were found to have positive relationships. Other findings show that majority of the respondents agree that income is a major factor that affects maternal nutrition of pregnant women in the area. A few other contributory factors are cultural practices, Distance to markets, source of support and level of education. The results indicate that while many pregnant women in Awka South consume nutritious meals, cultural beliefs and income levels greatly influence their dietary choices. Education had no significant effect, but free supplements, health talks, and food programmes helped improve maternal nutrition. Based on this findings, the study recommends nutrition education and culturally sensitive interventions to correct harmful food beliefs. It also advises economic support, free supplements, and strong community–health partnerships to improve and sustain maternal nutrition.

Keywords: Fetal development, food taboos, Malnutrition, Maternal nutrition, nutritional interventions

Introduction

Maternal nutrition refers to the dietary intake of foods, drinks, and essential nutrients required by women during pregnancy and breastfeeding to support maternal health, fetal development, and child growth (WHO, 2021). Adequate maternal nutrition is widely recognized as a critical determinant of pregnancy outcomes, as it supports proper fetal growth, reduces the risk of pregnancy complications, and influences the long term physical and cognitive development of children (Black et al., 2017). Conversely, maternal malnutrition contributes significantly to maternal mortality, low birth weight, and developmental delays, particularly in low and middle-income countries (WHO, 2020). Socio-cultural factors are the social norms, beliefs, traditions, and economic conditions that shape behaviour and significantly influence maternal nutrition practices during pregnancy (Triandis, 2018).

Historically, the relationship between maternal nutrition and pregnancy outcomes has evolved over time. Early twentieth-century research established the link between maternal diet and fetal health, emphasizing the importance of adequate nutrient intake. By the mid-twentieth century, global health organizations such as the World Health Organization began integrating maternal nutrition into public health initiatives through the promotion of prenatal vitamins and nutritional guidelines. In recent decades, attention has expanded to socio-cultural and economic determinants, recognizing that maternal nutrition is influenced not only by biological needs but also by cultural beliefs, social structures, and economic realities (WHO, 2020).

Globally, socio-cultural factors such as food insecurity, cultural beliefs, traditional practices, and poverty continue to undermine maternal nutrition. UNICEF (2023) reports that over one billion adolescent girls and women suffer from under-nutrition worldwide, with acute malnutrition among pregnant and breastfeeding women increasing by twenty five percent between 2020 and 2022 in twelve crisis-affected countries, including Nigeria. Cultural

beliefs further worsen the problem, as seen in some South Sudanese communities where protein consumption during pregnancy is believed to cause miscarriage, resulting in maternal and child malnutrition (Ezeama and Okeke, 2021). Traditional health practices, including the use of herbal remedies during pregnancy, remain common in countries such as Uganda and have been linked to risky health behaviors and increased maternal mortality. Economic constraints also limit access to nutritious food, as observed in rural Bangladesh where poverty forces pregnant women to depend on low quality diets despite awareness of nutritional needs (UNICEF, 2020).

In Nigeria, particularly in Awka South Local Government Area of Anambra State, similar socio cultural factors influence maternal nutrition. Traditional food beliefs, gender roles that restrict women's autonomy, economic challenges, and reliance on traditional healthcare practices continue to shape dietary behavior during pregnancy (Chiejina, 2024). Awka South is a culturally rich area where indigenous practices strongly influence health related behavior. Despite improvements in maternal health services and education, many pregnant women still adhere to food taboos, spiritual explanations of pregnancy complications, and traditional birth practices that conflict with modern nutritional recommendations (Bentina, 2015; Ntoimo and Odimegwu, 2014).

Although several studies in Nigeria have examined socio cultural factors affecting maternal nutrition, significant gaps remain. Ojofeitimi et al. (2003) focused mainly on food taboos, limited household decision making autonomy, and traditional gender roles in Southwestern Nigeria. Ekwochi et al. (2016) examined food taboos and myths in Southeastern Nigeria. While these studies provide valuable insights, they pay limited attention to male involvement in pregnancy, gender roles in maternal nutrition, and the integration of cultural beliefs into maternal health interventions. Furthermore, there is limited research specifically addressing these issues in Awka South Local Government Area.

Despite existing interventions such as micronutrient supplementation programs, antenatal care services, nutrition education campaigns, and women empowerment initiatives, poor maternal nutritional outcomes persist in many communities. Socio cultural beliefs continue to restrict dietary choices and access to healthcare, while patriarchal family structures limit

women's independence in nutrition and health related decision making (NDHS, 2018). Addressing these gaps requires context specific and culturally sensitive research and interventions that actively involve women, men, families, community leaders, and traditional health practitioners. It is within this context that this study seeks to examine the socio cultural factors influencing maternal nutrition during pregnancy and child development in Awka South Local Government Area of Anambra State.

Research Questions

The research work is basically concerned with the socio-cultural factors affecting maternal nutrition during pregnancy in Awka South

1. What are the cultural practices affecting dietary choices of pregnant women in Awka South?

2. What are the social factors influencing maternal nutrition during pregnancy in Awka South?

3. What are the measures towards improving maternal nutrition during pregnancy?

Objectives of The Study

The general objective of this study is to examine the socio-cultural factors affecting maternal nutrition during pregnancy. The specific objectives are as follows:

1. To know the cultural practices affecting dietary choices of pregnant women in Awka South.
2. To know the social factors influencing maternal nutrition during pregnancy in Awka South.
3. To formulate measures towards improving maternal nutrition in Awka South.

Theoretical Framework

Health Belief Model as being adopted as the theoretical framework of this study. First, the health belief model emphasizes that health-related actions are influenced by personal perceptions of health threats and the evaluation of behaviors to counteract these threats.

This focus aligns with examining the socio- cultural factors affecting maternal nutrition during pregnancy and child development in Awka south. By prioritizing the health Belief of people, researchers can explore how social factors influence maternal nutrition in pregnant women. For instance, access to quality healthcare services influences maternal nutrition. While antenatal care attendance is relatively high in Anambra State, the quality and comprehensiveness of nutritional counseling during these visits vary. Limited access to postnatal care further exacerbates nutritional challenges for mothers and their children. Secondly, this model provides a comprehensive framework for analyzing the social context surrounding maternal nutrition during pregnancy and child development. Understanding these dynamics is important for developing effective interventions that address not only malnutrition in pregnant women but also the decision they take.

Study Hypotheses

The following hypotheses have been formulated to guide this study.

1. Educated women are more likely to make correct diet choices than uneducated women in Awka South.
2. There is a significant relationship between level of income and maternal nutrition during pregnancy in Awka South.

Methodology

The study adopted a descriptive cross sectional research design and made use of both quantitative and qualitative methods in order to obtain comprehensive data on the subject matter. The quantitative aspect involved the administration of structured questionnaires to women of reproductive age, while the qualitative aspect involved in depth interviews with selected maternal health professionals. This mixed methods approach was considered appropriate because it allowed for statistical measurement of key variables as well as deeper exploration of cultural beliefs, practices, and social norms that could not be adequately captured through questionnaires alone. The study was conducted in Awka South Local Government Area, which consists of eleven communities and serves as the administrative capital of Anambra State. The population of the study comprised women of

reproductive age between fifteen and forty nine years, with a projected population of seventy two thousand two hundred and twelve based on national census data and population growth estimates. The scope of the study was limited to examining socio cultural factors affecting maternal nutrition during pregnancy and suggesting measures for improving maternal nutrition in the study area. A sample size of two hundred and four respondents was determined using the Taro Yamane formula, while four health professionals were purposively selected for the qualitative interviews. A mixed sampling technique was employed, combining cluster sampling, simple random sampling, systematic sampling, and purposive sampling to ensure adequate representation across communities, villages, kindred, and households. Data collection instruments included a questionnaire schedule for quantitative data and an in depth interview guide for qualitative data, both of which were designed in simple English and aligned with the study objectives. The questionnaires were administered with the assistance of a trained research assistant, while the interviews were conducted by the researcher with permission from participants and the use of a tape recorder to ensure accuracy. Quantitative data collected were analyzed using the Statistical Package for the Social Sciences version twenty, with results presented using descriptive statistics such as frequencies, percentages, and graphical illustrations, while hypotheses were tested using chi square inferential statistics. Qualitative data from the interviews were analyzed using thematic analysis, which involved transcription, coding, and organization of data into themes, supported by relevant illustrative quotations.

Data Analysis And Presentation

In this study, 204 questionnaires were administered by the researcher, out of which 198 (96.56%) of the questionnaires were correctly filled and returned. Six questionnaires were not completely filled. The analysis is consequently based on the correctly filled and returned 198 questionnaires.

Socio-demographic Data of Respondents

Table 1: Distribution of respondents by their socio-demographic characteristics

Responses	Frequency	Percent
AGE		
15-24	44	22.2
25-34	93	47.0
35-44	40	20.2
45 and above	21	10.6
Total	198	100
MARITAL STATUS		
Single	29	14.6
Married	157	79.3
Separated	8	4.0
Widowed	4	2.0
Total	198	100
EDUCATIONAL ATTAINMENT		
No formal education	14	7.1
FSLC	23	11.6
SSCE	62	31.3
OND/NCE	36	18.2
Bachelor's Degree	43	21.7
Master's Degree	14	7.1
Ph.D.	6	3.0
Total	198	100
OCCUPATION		
Civil servant	59	29.8
Student	18	9.1
Unemployed	36	18.2
Self-employed	77	38.9
Others	8	4.0
Total	198	100
MONTHLY INCOME		
Less than ₦10,000	55	27.8
₦10,000–₦29,999	63	31.8
₦30,000–₦49,999	49	24.7
₦50,000 and above	31	15.7
Total	198	100
NUMBER OF CHILDREN		
1-3	120	60.6
4-6	50	25.3
7 and above	9	4.5
None	19	9.6
Total	198	100
RESIDENCE		

Urban area	128	64.6
Rural area	70	35.4
Total	198	100

Field Survey, 2025

The socio-demographic characteristics of respondents show that the sample is largely youthful, with 47.0% aged 25–34 years and 22.2% aged 15–24, while smaller proportions were recorded for those aged 35–44 (20.2%) and 45 years and above (10.6%), indicating that younger and middle-aged individuals dominate the study. Most respondents were married (79.3%), with 14.6% single, 4.0% separated and 2.0% widowed, suggesting a population largely composed of individuals with family responsibilities. Educationally, the largest proportion had SSCE (31.3%), followed by Bachelor's degrees (21.7%) and OND/NCE (18.2%), while smaller percentages reported FSLC (11.6%), Master's degrees (7.1%), no formal education (7.1%) and Ph.D. qualifications (3.0%), reflecting a moderately educated sample. In terms of occupation, self-employed individuals formed the highest group (38.9%), followed by civil servants (29.8%), unemployed persons (18.2%), students (9.1%) and others (4.0%), indicating a workforce dominated by those in informal or independent economic activities. Income distribution shows that a majority earned between ₦10,000–₦29,999 (31.8%) or less than ₦10,000 (27.8%), while 24.7% earned ₦30,000–₦49,999 and 15.7% earned ₦50,000 and above, suggesting that most respondents fall within low-income categories. Household size revealed that 60.6% had 1–3 children, 25.3% had 4–6 children, 4.5% had seven or more, and 9.6% had none, indicating predominantly small to medium family units. Finally, 64.6% of respondents resided in urban areas compared to 35.4% in rural areas, showing an urban-skewed sample whose perspectives may be shaped by urban living conditions and access to services.

Analysis Of Research Questions

This sub-section dealt with the analysis of data and interpretation of findings with regards to the research questions and specific objectives of the study.

Research Question 1: What are the cultural practices affecting dietary choices of pregnant women in Awka South? Questionnaire items 13-15 were designed to answer this research question. The findings are presented below:

Table 2: Respondents' views on whether they avoid certain foods due to cultural beliefs during pregnancy

Responses	Frequency	Percent
Yes	84	42.4
No	114	57.6
Total	198	100.0

Field Survey, 2025

Table 2 shows respondents' practices regarding food avoidance due to cultural beliefs. A total of 42.4% indicated that they avoid certain foods because of cultural beliefs, while 57.6% reported that they do not. This indicates that cultural practices influence dietary choices for a notable portion of pregnant women, although more than half do not follow such restrictions. An IDI participant noted:

Some stay away from foods like snails because they believe it may make the baby slow to talk. Others avoid eggs due to the belief that it may cause the child to become stubborn or develop undesirable traits. A few also avoid sugarcane, pineapples, or certain meats based on what they were taught by older family members. While some of these beliefs have no medical basis, they remain influential in shaping dietary choices. I notice that women who hold these beliefs tend to be cautious and may limit foods that are actually nutritious, which sometimes affects dietary balance during pregnancy (Male, Pharmacist, 39 years, Awka, 2025).

Table 3: Respondents' views on cultural beliefs influencing diet during pregnancy

Responses	Frequency	Percent
Food restrictions	67	33.8
Beliefs about food properties	65	32.8
Traditional dietary recommendations	66	33.3
Total	198	100.0

Field Survey, 2025

Table 3 shows the specific ways cultural beliefs influence the diet of respondents. A total of 33.8% reported following food restrictions, 32.8% indicated that their beliefs about food properties guide their dietary choices, and 33.3% adhered to traditional dietary recommendations. This distribution demonstrates that cultural beliefs shape dietary practices in multiple ways, affecting the food choices of pregnant women. According to an IDI participant:

Cultural beliefs strongly influence the diet of many pregnant women. Several of them explain that their food choices are guided by what they were taught by parents, elders, or traditional caregivers. Some foods are seen as "taboo" during pregnancy, not because of medical reasons but because of long-held cultural interpretations. This includes avoiding certain proteins, fruits, or locally prepared foods due to fears that they may affect the baby's behaviour, appearance, or delivery process (Male, Pharmacist, 39 years, Awka, 2025).

Another IDI participant noted:

Cultural beliefs continue to play a major role in how pregnant women approach their diet. Many of them share that these beliefs influence what they consider safe or unsafe to eat, often leading to the avoidance of foods that are actually nutritious. These restrictions may come from family traditions, community advice, or generational stories passed down over time (Female, Nurse, 35 years, Awka, 2025).

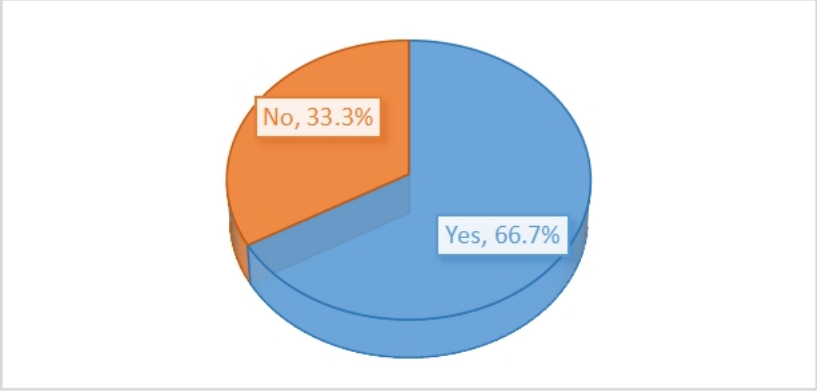
Table 4: Respondents' views on who decides what they eat during pregnancy

Responses	Frequency	Percent
Self	45	22.7
Husband	54	27.3
Family/in-laws	54	27.3
Shared decision	45	22.7
Total	198	100.0

Field Survey, 2025

Table 4 shows who decides what respondents eat during pregnancy. A total of 27.3% reported that their husband decides, another 27.3% said family or in-laws make the decision, 22.7% indicated that they make the decision themselves, and 22.7% reported that the decision is shared. This distribution suggests that decisions about dietary intake during pregnancy are influenced by both family members and the pregnant women themselves, with no single group dominating.

Research Question 2: What are the social factors influencing maternal nutrition during pregnancy in Awka South? Questionnaire items 16-20 were designed to answer this research question. The findings are presented below:



Field Survey, 2025

Fig 1: Respondents' views on whether income affects their diet during pregnancy

Figure 1 shows the impact of income on respondents' diet during pregnancy. A total of 66.7% indicated that their income affects what they eat, while 33.3% reported that it does not. This suggests that financial resources play a significant role in shaping dietary choices for a large proportion of pregnant women.

Income has a strong influence on a pregnant woman's diet. Access to fresh fruits, vegetables, protein, and other nutritious foods depends heavily on financial resources. When income is limited, women may prioritize cheaper staples and reduce the variety of foods in their meals, which can affect overall nutrition (Female, Midwife, 37 years, Awka, 2025).

Another IDI participant opined:

Of course! Income plays a key role in shaping dietary habits during pregnancy. Women with higher or regular income can afford a wider variety of nutritious foods and are able to maintain more balanced meal patterns. Conversely, limited income restricts access to essential foods like fresh vegetables, fruits, dairy, and protein sources, often leading to reliance on less nutrient-dense options (Male, Doctor, 45 years, Awka, 2025).

Table 8: Respondents' views on whether they receive financial support during pregnancy

Responses	Frequency	Percent
Yes	100	50.5
No	98	49.5
Total	198	100.0

Field Survey, 2025

Table 5 shows respondents' access to financial support during pregnancy. A total of 50.5% reported receiving financial support, while 49.5% indicated that they do not. This distribution indicates an almost equal split, suggesting that access to financial assistance is limited for a significant portion of pregnant women.

Table 6: Respondents' views on their sources of financial support during pregnancy

Responses	Frequency	Percent
NGOs and Community groups	8	4.0
Family relations	50	25.0
Others	42	21.0
Total	100	100.0

Field Survey, 2025

Table 6 presents respondents' views on their sources of financial support during pregnancy. Among those who received support, 25% reported that it came from family relations, 21% indicated other sources, and 4% received support from NGOs and community groups. This distribution shows that family remains the most common source of financial assistance, while institutional or external support is less frequently accessed.

Table 7: Respondents' views on the problems they face in accessing nutritious food during pregnancy

Responses	Frequency	Percent
Lack of nutritional knowledge	47	23.7
Financial constraints	54	27.3
Distance to markets	51	25.8
Food insecurity	46	23.2
Total	198	100.0

Field Survey, 2025

Table 7 presents the problems respondents face in accessing nutritious food during pregnancy. Financial constraints were reported by 27.3% of respondents, distance to markets by 25.8%, lack of nutritional knowledge by 23.7%, and food insecurity by 23.2%.

This indicates that multiple factors hinder access to nutritious food, with financial limitations and market accessibility being the most commonly reported challenges. According to an IDI participant:

Accessing nutritious food during pregnancy is often challenging due to several factors. Financial constraints are a major issue, as many women cannot afford fresh fruits, vegetables, and protein-rich foods on a regular basis. Availability is another problem, especially in rural areas where markets may be far away or certain foods are seasonal. Some women face physical limitations, such as fatigue or illness that make it difficult to shop or prepare meals (Female, Nurse, 35 years, Awka, 2025).

Table 8: Respondents' views on whether women have knowledge of proper nutrition during pregnancy

Responses	Frequency	Percent
Yes	65	32.8
No	68	34.3
Not sure	65	32.8
Total	198	100.0

Field Survey, 2025

Table 8 shows respondents' knowledge of proper nutrition during pregnancy. A total of 32.8% indicated that they have good knowledge, 34.3% stated that they do not, and 32.8% were not sure. This distribution suggests that knowledge of proper nutrition among pregnant women is varied, with a significant proportion either lacking clarity or confidence in their understanding. According to an IDI participant:

Women generally show a basic understanding of proper nutrition during pregnancy. Many are aware that they need to eat a balanced diet that includes fruits, vegetables, proteins, and whole grains. They know that certain foods, like iron-rich items and folate sources, are important for the baby's development and for preventing complications such as anaemia. However, while awareness exists, knowledge is sometimes incomplete, and misconceptions

from cultural beliefs or family advice can affect their choices (Female, Midwife, 37 years, Awka, 2025).

Research Question 3: What are the measures towards improving maternal nutrition during pregnancy in Awka South LGA? Questionnaire items 21-22 were designed to answer this research question. The findings are presented below:

Table 9: Respondents' views on support that would improve nutrition during pregnancy

Responses	Frequency	Percent
Free supplements	40	20.2
Health talks	36	18.2
Food programmes	40	20.2
Cultural education	36	18.2
All of the above	46	23.2
Total	198	100.0

Field Survey, 2025

Table 9 shows respondents' views on the types of support that would improve nutrition during pregnancy. A total of 23.2% indicated that all the listed interventions, free supplements, health talks, food programmes, and cultural education would be helpful. Individually, 20.2% preferred free supplements, another 20.2% preferred food programmes, 18.2% favoured health talks, and 18.2% selected cultural education. This distribution indicates that a combination of interventions is considered most effective in enhancing maternal nutrition. An IDI participant opined:

Pregnant women should have access to affordable and diverse foods, especially fruits, vegetables, and protein-rich items. Education and guidance from healthcare providers are also important, helping women understand what foods to eat, how to prepare them, and the importance of supplements. Community-based programmes can make a big difference, particularly for women with limited income or access to markets. Family support is equally

important, as it encourages women to prioritize their meals and ensures they have help with food preparation and other household responsibilities (Female, Midwife, 37 years, Awka, 2025).

Another IDI participant:

Improving nutrition during pregnancy requires a range of supportive measures. Women benefit from health education that clearly explains dietary requirements, the role of supplements, and how to include nutrient-rich foods in daily meals (Male, Doctor, 45 years, Awka, 2025).

Table 10: Respondents' views on whether they will support community-based food or supplement programmes for pregnant women

Responses	Frequency	Percent
Yes	56	28.3
No	77	38.9
Not sure	65	32.8
Total	198	100.0

Field Survey, 2025

Table 10 presents respondents' views on supporting community-based food or supplement programmes for pregnant women. A total of 28.3% indicated they would support such programmes, 38.9% stated they would not, and 32.8% were not sure. This distribution reflects varying levels of willingness to participate in or endorse community-level nutritional initiatives.

Test of Hypotheses

In this section, the two hypotheses formulated to guide this study were tested using chi-square inferential statistics and interpreted.

Hypothesis one: H_1: Educated women are more likely to make correct diet choices than uneducated women in Awka South.

Table 11: Relationship between level of education and the likelihood to make correct diet choices during pregnancy in Awka South LGA

			Do you eat highly nutritious meals during pregnancy?		
			Yes	No	Total
Highest educational attainment	No formal education	Count	5	9	14
		Expected Count	9.3	4.7	14.0
	FSLC	Count	16	7	23
		Expected Count	15.3	7.7	23.0
	SSCE	Count	43	19	62
		Expected Count	41.3	20.7	62.0
	OND/NCE	Count	24	12	36
		Expected Count	24.0	12.0	36.0
	Bachelor's Degree	Count	28	15	43
		Expected Count	28.7	14.3	43.0
	Master's Degree	Count	11	3	14
		Expected Count	9.3	4.7	14.0
	Ph.D.	Count	5	1	6
		Expected Count	4.0	2.0	6.0
Total		Count	132	66	198
		Expected Count	132.0	66.0	198.0
X^2=8.014, DF=6, P-value=0.237					

Field Survey, 2025

The chi-square value (X^2) is 8.014 with 6 as the degree of freedom, and a p-value of 0.237. Since the p-value is greater than the 0.05 significance level, we accept the null hypothesis

and reject the alternative hypothesis that states that educated women are more likely to make correct diet choices than uneducated women in Awka South LGA. This indicates that there is no statistically significant relationship between women's level of education and their likelihood to make correct dietary choices during pregnancy in Awka South LGA.

Hypothesis two: H_1: There is a significant relationship between level of income and maternal nutrition during pregnancy in Awka South.

Table 12: Relationship between level of income and maternal nutrition during pregnancy in Awka South

			Do you eat highly nutritious meals during pregnancy?		
			Yes	No	Total
Average monthly income	Less than ₦10,000	Count	35	20	55
		Expected Count	36.7	18.3	55.0
	₦10,000–₦29,999	Count	43	20	63
		Expected Count	42.0	21.0	63.0
	₦30,000–₦49,999	Count	32	17	49
		Expected Count	32.7	16.3	49.0
	₦50,000 and above	Count	22	9	31
		Expected Count	20.7	10.3	31.0
Total		Count	132	66	198
		Expected Count	132.0	66.0	198.0
X^2=15.598, DF=3, P-value=0.049					

Field Survey, 2025

The chi-square value (X^2) is 15.598 with 3 as the degree of freedom, and a p-value of 0.049. Since the p-value is less than the 0.05 significance level, we reject the null hypothesis and accept the alternative hypothesis that states that there is a significant relationship between level of income and maternal nutrition during pregnancy in Awka South LGA. This indicates that income level has a statistically significant influence on whether pregnant women consume highly nutritious meals in the study area.

Discussion of Findings

This study also found that food restrictions, beliefs about food properties, and traditional dietary recommendations are key cultural practices shaping the dietary choices of pregnant women in Awka South. This finding is consistent with evidence from other studies showing that cultural norms strongly influence what pregnant women consider acceptable or beneficial to eat. For instance, Ekwochi et al. (2016) reported that many women in South Eastern Nigeria avoid certain nutritious foods during pregnancy because of long-held myths and taboos, demonstrating how cultural beliefs can override nutritional needs and medical advice. Similarly, Oluleke et al. (2016) found that pregnant women in Ile-Ife often restricted specific foods based on traditional notions about their effects on pregnancy outcomes, even when such restrictions reduced their access to essential nutrients. Collectively, these studies reinforce the present finding that cultural beliefs and practices remain powerful determinants of maternal dietary behaviour, shaping both food choices and overall nutrition during pregnancy.

The study found income to be a major factor influencing maternal nutrition during pregnancy in Awka South. This finding is consistent with evidence from other studies showing that household economic capacity plays a critical role in determining the quality and adequacy of food intake among pregnant women. For instance, the Nigeria Demographic and Health Survey (NDHS) (2018) reported that women from low-income households are significantly more likely to experience poor dietary diversity and micronutrient deficiencies during pregnancy due to limited access to nutritious foods. Similarly, the World Bank (2020) observed that poverty and income instability in Nigeria

directly constrain households' ability to afford balanced diets, thereby increasing the risk of maternal under-nutrition and its associated pregnancy complications. Collectively, these studies affirm that the strong link between income and maternal nutrition identified in the present study reflects a broader scholarly consensus that financial resources are a fundamental determinant of nutritional wellbeing among pregnant women, particularly in low- and middle-income settings such as Awka South.

This study also revealed that providing free supplements, health talks, food programmes, and cultural education are key measures for improving maternal nutrition during pregnancy in Awka South LGA. This finding is consistent with evidence from other studies showing that comprehensive nutrition interventions significantly enhance maternal dietary practices and pregnancy outcomes. For instance, UNICEF (2020) reported that the provision of micronutrient supplements combined with continuous nutrition education during antenatal care markedly improves the nutritional status of pregnant women and reduces the prevalence of maternal under-nutrition in low-resource settings. Similarly, Kassa et al. (2018) found that pregnant women who had access to regular health talks and nutrition-focused antenatal services were more likely to adopt appropriate feeding practices and meet their nutritional requirements throughout pregnancy. Collectively, these studies support the present finding by demonstrating that integrated strategies involving supplementation, structured health education, food support programmes, and culturally sensitive education are effective and sustainable approaches to improving maternal nutrition during pregnancy.

Based on the tested hypotheses, the study found that there is no statistically significant relationship between women's level of education and their likelihood to make correct dietary choices during pregnancy in Awka South LGA. This finding contrasts with the dominant assumption that higher education automatically translates into better nutrition practices, but it aligns with evidence suggesting that education alone may not be sufficient when economic, cultural, and environmental constraints are strong. For instance, Ekwochi et al. (2016) reported that despite varying levels of formal education among mothers in South-Eastern Nigeria, food taboos, myths, and traditional beliefs continued to strongly influence dietary practices during pregnancy, often overriding scientific nutritional

knowledge. Similarly, the Nigeria Demographic and Health Survey (NDHS) (2018) showed that while educated women generally had better knowledge of nutrition, actual dietary choices during pregnancy were more strongly predicted by household income and food availability than by educational attainment alone.

Finally, this study found that there is a significant relationship between level of income and maternal nutrition during pregnancy in Awka South LGA. This finding is consistent with a broad body of evidence showing that household income strongly determines access to adequate, diverse, and nutritious foods during pregnancy. For instance, Black et al. (2013) reported that maternal undernutrition in low-income countries is largely driven by poverty and limited financial access to nutrient-rich diets, which directly affects pregnancy outcomes and fetal development. Similarly, Ezeama et al. (2015) observed among mothers in Anambra State that households with low income experienced greater food insecurity, which significantly compromised the nutritional status of both mothers and their children.

The findings of this study can be clearly explained using the Health Belief Model (HBM), which posits that health behaviours are shaped by individuals' perceptions of susceptibility, severity, benefits, barriers, and cues to action. The generally positive maternal nutrition practices observed among pregnant women in Awka South reflect perceived benefits of healthy eating and increased cues to action provided through antenatal care, health talks, and community nutrition education. Cultural food beliefs and restrictions align with perceived barriers within the HBM, as deeply rooted myths and traditions influence women's assessment of what foods are safe or harmful during pregnancy, sometimes outweighing medical advice. The strong influence of income on maternal nutrition highlights structural barriers, where financial constraints limit women's ability to act on perceived benefits despite adequate knowledge or education, explaining the non-significant relationship between formal education and dietary choices. Furthermore, the effectiveness of interventions such as free supplements, food programmes, and culturally sensitive education represents external cues to action that enhance self-efficacy and facilitate healthier nutritional behaviours.

Conclusion

This study examined the socio-cultural factors affecting maternal nutrition during pregnancy in Awka South LGA, revealing that maternal nutrition is shaped by a complex interaction of income, cultural beliefs, knowledge, and access to support services. The findings show that while a majority of respondents reported consuming nutritious meals during pregnancy, a considerable proportion still do not, indicating persistent gaps in dietary practices. Cultural beliefs, food restrictions, and traditional dietary recommendations were found to significantly influence what pregnant women eat, often overriding medical advice and limiting access to essential nutrients. Income emerged as a critical determinant of maternal nutrition, with women from higher-income households more able to afford diverse and nutrient-rich foods, while those from low-income households faced financial constraints, food insecurity, and limited dietary options. Notably, the study established that women's level of education did not have a statistically significant relationship with correct dietary choices, suggesting that education alone is insufficient when economic and cultural barriers are strong. Conversely, a significant relationship was found between income level and maternal nutrition, underscoring the central role of economic capacity in shaping dietary outcomes. The study also identified free supplements, health talks, food programmes, and cultural education as key strategies for improving maternal nutrition.

Recommendations

Based on the findings of this study, the following recommendations have been made:

To improve maternal nutrition during pregnancy, health authorities, community organizations, and local government agencies should implement comprehensive nutrition education programs. These programmes can include regular health talks, cooking demonstrations, distribution of educational materials, and antenatal workshops.

Given the influence of cultural beliefs and food taboos on dietary practices, community leaders, healthcare workers, and NGOs should develop culturally sensitive interventions that address harmful myths while respecting traditions.

Recognizing the critical role of household income in maternal nutrition, government agencies and development partners should introduce economic support initiatives for pregnant women and low-income households.

To ensure wider access to essential nutrients, health authorities and NGOs should provide free or subsidized maternal supplements and fortified foods as part of antenatal care services. Integrating supplementation with ongoing nutrition counseling and monitoring can help pregnant women meet their dietary requirements and reduce the risk of under-nutrition.

To sustain improvements in maternal dietary practices, local health systems should strengthen partnerships between healthcare providers, community groups, and families. Coordinated efforts can include regular follow-ups, support groups for pregnant women, and community-based nutrition programmes that reinforce positive behaviours.

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