ISSN 2664-7354 (Online) & ISSN 2708-2687 (Print)

Volume: 7, Issue: 12
Page: 218- 233
YEAR: 2025

International Journal of Academic Research in Business, Arts and Science (IJARBAS.COM)

Knowledge and Practice of Adequate Prenatal Nutrition among Pregnant Women in Ekiti State, Nigeria

AUTHOR(S): GENTRY Oluwabukola Ayo, EDET Joseph Asuquo, IRORERE Florence Adesuwa, ATAGUBA Ilemona, OWOLABI Moyinoluwa Mary

Abstract

This study evaluated the knowledge and practice of adequate prenatal nutrition among pregnant women attending antenatal care at the Comprehensive Health Centre, Okeyinmi, Ado-Ekiti Metropolis. The specific objectives were to assess women's knowledge of prenatal nutrition, identify common sources of nutritional information and their effectiveness, determine the perceived importance of prenatal nutrition, and examine the level of practice of recommended dietary guidelines. A cross-sectional descriptive design was employed, and 132 pregnant women were selected using a convenient sampling technique. Data were collected through a structured questionnaire comprising five sections covering socio-demographic characteristics, knowledge, information sources, perceived importance, and dietary practices. Validity was ensured through expert review, while reliability was confirmed via a pilot study, yielding a Cronbach's alpha of 0.79. Data analysis was performed using SPSS version 25, with results presented in tables, charts, and chi-square analyses. Findings indicated that the majority of respondents demonstrated good knowledge of prenatal nutrition, recognized its importance for maternal and fetal health, and sourced information primarily from hospitals. Despite this, barriers such as food cravings, financial constraints, time limitations, and incomplete nutrient-specific knowledge were identified, and knowledge did not always translate into consistent dietary practices. The study underscores the need for practical nutrition education, peer-support mechanisms, financial support for access to healthy foods, and continuous monitoring of dietary adherence during antenatal care.

Keywords: Prenatal nutrition, Pregnant women, Dietary practices, Antenatal care, Nutritional knowledge,

IJARBAS
Accepted 15 December 2025
Published 24 December 2025
DOI: 10.5281/zenodo.18053238

About Author

Author(s):

GENTRY Oluwabukola Ayo
Department of Nursing Sciences,
Ekiti State University, Ado – Ekiti

EDET Joseph Asuquo
Wellspring University, Benin

IRORERE Florence Adesuwa
College of Nursing Sciences
University of Benin Teaching Hospital, Benin-City

ATAGUBA Ilemona
Achievers University, Owo, Ondo State

OWOLABI Moyinoluwa Mary
Department of Nursing Sciences,
Ekiti State University, Ado – Ekiti

Introduction

Adequate nutrition during pregnancy is fundamental not only for the growth and development of the fetus but also for the health and well-being of the mother, with long-term implications for both maternal and child health. The prenatal period represents a critical window during which maternal physiological and metabolic systems are highly responsive to dietary nutrient intake and environmental factors. Poor nutrition during this period has been linked to adverse maternal and neonatal outcomes, including delayed fetal growth, premature birth, low birth weight, and maternal anemia (Rizk, 2023; Wang, 2023). Consequently, promoting optimal maternal nutrition has become a central public health concern, particularly in developing countries where malnutrition among pregnant women remains prevalent.

Pregnancy significantly increases the demand for energy, macronutrients, and micronutrients to support fetal development and maternal health. For example, requirements for essential nutrients such as iron, folate, calcium, and vitamins increase substantially during gestation, while protein and caloric intake must also rise to accommodate the growing fetus (Gebremichael & Lema, 2023). Maternal undernutrition, including deficiencies in micronutrients, has been shown to contribute to maternal morbidity, increased susceptibility to infections, and mortality, as well as poor neonatal outcomes such as low birth weight, stunting, and higher infant mortality rates (Mudasir et al., 2024; Olatona et al., 2021). Globally, maternal malnutrition continues to be a leading contributor to adverse pregnancy outcomes, with sub-Saharan Africa bearing a disproportionate burden. In 2020 alone, approximately 287,000 women died during pregnancy or childbirth, with the majority occurring in this region. In addition, an estimated 2.4 million children died in the first month of life in 2020, largely as a consequence of maternal undernutrition and associated complications (World Health Organization, 2020; Olatona et al., 2021).

Maternal nutrition is not solely a matter of food intake but is also influenced by nutritional knowledge and socio-demographic factors. Studies have consistently demonstrated that pregnant women's dietary behaviors are shaped by their level of education, age, parity, socio-economic status, and cultural beliefs (Papežová, 2023). In Nigeria, for example, nutritional taboos and misconceptions persist, often leading pregnant women to avoid certain nutrient-rich foods, such as eggs, fish, and meat, which are critical for fetal growth. Such practices, combined with poverty and low levels of formal education, contribute to inadequate dietary intake and poor adherence to nutritional recommendations (Olatona et al., 2021). The Nigeria Demographic and Health Survey reports that 11% of women are undernourished, while 25% are overweight, highlighting the coexistence of under- and over-nutrition among women of reproductive age (NDHS, 2024). These disparities underscore the need for context-specific interventions to improve nutritional knowledge and practices during pregnancy.

The World Health Organization (WHO) recommends that pregnant women receive adequate guidance on consuming sufficient macronutrients and micronutrients to prevent complications and ensure positive pregnancy outcomes. Despite these recommendations, many women fail to meet the required nutrient intake levels, increasing their risk of maternal anemia, pregnancy-induced hypertension, neonatal low birth weight, and other adverse outcomes (Ojo et al., 2023). Studies in Nigeria have shown that adherence to recommended practices such as iron-folic acid supplementation remains suboptimal, with only a fraction of women taking the supplements for the recommended duration (Mudasir et al., 2024). This highlights a critical gap between knowledge, practice, and accessibility of nutritional interventions during pregnancy.

Research indicates that antenatal care (ANC) provides an ideal platform to enhance maternal nutrition knowledge and practices. Health professionals can offer targeted nutrition counseling during routine ANC visits, thereby promoting behavior change and better pregnancy outcomes (Gezimu et al., 2022; McCarthy et al., 2024). However, in settings such as Ekiti State, Nigeria, several challenges hinder the effective translation of knowledge into practice. Many pregnant women lack awareness of appropriate food choices, face financial constraints, and are influenced by culturally rooted misconceptions regarding diet during pregnancy. These factors contribute to the prevalence of malnutrition, poor maternal health, and the increased likelihood of adverse birth outcomes (Fowles, 2000).

Empirical evidence from Nigeria reinforces the relationship between maternal knowledge, socioeconomic status, and dietary practices. For instance, a study in Ado-Ekiti revealed that many pregnant women were ignorant of optimal food choices and consumed low-status diets, leading to undernutrition and related complications (JK, 2020). Similarly, a study in Delta State indicated that age, marital status, place of residence, and education significantly influenced dietary patterns, with younger, divorced, or rural women more likely to consume unhealthy diets (Ojo et al., 2023). These findings suggest that nutritional interventions must be tailored to the socio-demographic and cultural context to be effective (Gentry et al., 2025).

Focusing on the knowledge and practice of adequate prenatal nutrition is crucial to improving maternal and child health outcomes. Understanding the level of awareness and the extent of application of nutritional guidelines among pregnant women in Ekiti State can identify gaps in education, adherence, and access to nutritional support. This information is essential for designing targeted interventions that can improve maternal dietary behaviors, reduce the risk of malnutrition, and promote positive pregnancy outcomes. Therefore, this study seeks to assess pregnant women's knowledge and practice of adequate prenatal nutrition in Ado-Ekiti, with the goal of informing policies and programs that enhance maternal and fetal health in the region.

The aim of this study is to evaluate the knowledge and practice of adequate prenatal nutrition among pregnant women in Ado-Ekiti Metropolis. The specific objectives of the study were to:

1. assess the level of knowledge of the women on adequate prenatal nutrition among women attending Ado-Ekiti metropolis;
2. determine the common sources of their nutritional information and evaluate the effectiveness of these sources;
3. assess the importance of adequate prenatal nutrition among pregnant women; and
4. examine the level of practice of the recommended prenatal nutrition in their daily eating habits.

Methods and Materials

The study employed a cross-sectional descriptive design to investigate the knowledge and practice of adequate prenatal nutrition among pregnant women attending antenatal care at the Comprehensive Health Centre, Okeyinmi, Ado-Ekiti Metropolis, Ekiti State. The target population comprised pregnant women who regularly attend the prenatal and immunization clinics at the health center, which typically sees approximately 150 women. The facility, located beside Bisi Market in Okeyinmi, is a 13-bed center managed by doctors, nurses, midwives, community health extension workers, and health assistants, providing round-the-clock services to its clients. The cross-sectional approach was deemed appropriate as it allowed for the collection of data on participants' knowledge, attitudes, and practices at a single point in time, thereby providing a snapshot of prenatal nutrition behaviors among the study population.

A total of 132 respondents were selected for the study. The sample size was initially calculated using Taro Yamane's formula (1967) for a finite population, which produced a sample of 120 participants. To account for potential non-responses or incorrectly completed questionnaires, a 10% attrition rate was applied, bringing the final sample size to 132. Participants were recruited using a convenient sampling technique, which involved selecting pregnant women who were readily available and willing to participate during clinic days. While this method does not generate a randomly selected sample, it was considered suitable for the study due to the accessibility and willingness of respondents. Data were collected using a structured questionnaire comprising five sections and 32 items. Section A captured socio-demographic information, Section B assessed knowledge of prenatal nutrition, Section C explored sources of nutritional information and their perceived effectiveness, Section D evaluated the perceived importance of adequate nutrition using a Likert scale, and Section E examined actual dietary practices during pregnancy, also using a Likert scale.

The validity and reliability of the research instrument were ensured through expert review and a pilot study. Face and content validity were confirmed by experts in tests and measurement to ensure that the questionnaire accurately measured the intended constructs. Reliability was assessed by administering 10% of the questionnaire (13 respondents) to pregnant women at Iworoko Health Center. Data from the pilot study were analyzed using the Statistical Package for Social Sciences (SPSS) version 25, and Cronbach's alpha was calculated, yielding a coefficient of 0.79, indicating good internal consistency. During the main study, all 132 questionnaires were administered after obtaining informed consent, and completed forms were collected immediately to minimize loss and ensure completeness. Data were subsequently analyzed using SPSS, with results presented in frequency tables, charts, and chi-square contingency tables to examine relationships between variables and to provide a clear representation of respondents' knowledge and practices regarding prenatal nutrition.

Results

Table 1: General characteristics and socio-demographical factors of the study participants

Variables	Frequency(n=132)	Percentage(%)
Age		
20 – 24	11	8.3
25 – 29	29	22.0
30 – 34	34	25.8
35 – 36	27	20.5
≥40	31	23.5
Marital status		
Married	115	87.1
Single	13	9.8
Divorced	4	3.0
Occupation		
Civil servant	39	29.5
Full house wife	20	15.2
Self employed	51	38.6
Trading	22	16.7
Religion		
Christianity	101	76.5
Islam	25	18.9
Traditional	6	4.5

Tribe		
Egbira	8	6.1
Hausa	9	6.8
Igbo	15	11.4
Yoruba	100	75.8
Level of Education		
Primary education	7	5.3
Secondary education	18	12.1
BSC/BTECH	60	60.6
OND	11	8.3
NCE	6	4.5
HND	12	9.1
Necessity of nutrients		
Calcium	24	18.2
Folic Acid	57	43.2
Iron	18	13.6
Protein	33	25.0
Nutrition guidance satisfaction		
Yes	94	71.2
No	38	28.8

Table 1 shows the demographic characteristics of respondents. The tables revealed that majority of the respondents 34(25.8%) are between 30-34 years of age. 11(8.3%) are between 20-24 years, 29(22.0%) are between 25-29 years, 27(20.5%) are between 35-36 years while 31(23.5%) of the respondents are 40 years and above. The marital status revealed that 115(87.1%) of the respondents were married, 13(9.8%) were single while 4(3.0%) were divorced. The occupation category revealed that 39(29.5%) of the respondents were civil servants, 20(15.2%) of the respondents were full house wife, 51(38.6%) were self-employed, 22(16.7%) of the respondents were traders. The table also shows the distribution of respondents based on their religion. 101(76.5%) were Christians, 25(18.9%) were Muslim while 6(4.5%) of the respondents were traditional. The tribe category is revealed that majority of the respondents 100(75.8%) were Yoruba, 15(11.4%) were Igbo, 9(6.8%) were Hausa while 8(6.1%) were Egbira. Level of education revealed that 60(60.6%) had BSc/Btech, 18(12.1%) had secondary education, 12(9.1%) had HND, 11(8.3%) had OND, 7(5.3%) had primary education while 6(4.5%) had NCE. The table also revealed the recommended nutrients that were necessary. 24(18.2%) of the respondents recommended calcium as a necessary nutrient, 57(43.2%) recommended folic acid as a necessary nutrient, 18(13.6%) recommended iron as a necessary nutrient while 33(25.0%) recommended protein as a necessary nutrient. The nutrition guidance satisfaction revealed that 94(71.2%) were satisfied while 38(28.8%) were not satisfied.

Table 2 : Challenges faced in maintaining healthy diet

Challenges	Frequency	Percentage(%)
Financial constraints	40	30.3
Food cravings	47	35.6
Lack of Knowledge	22	16.7
Time constraints	23	17.4
Total	**132**	**100**

Table 2 shows the distribution of respondents based on challenges faced in maintaining healthy diet among mothers. Majority of the respondents 47(35.6%) were being faced with food cravings, 40(30.3%) had financial constraints which challenged the maintenance of healthy diet, 23(17.4%) were influenced by time constraints, while 22(16.7%) were challenged due to lack of knowledge.

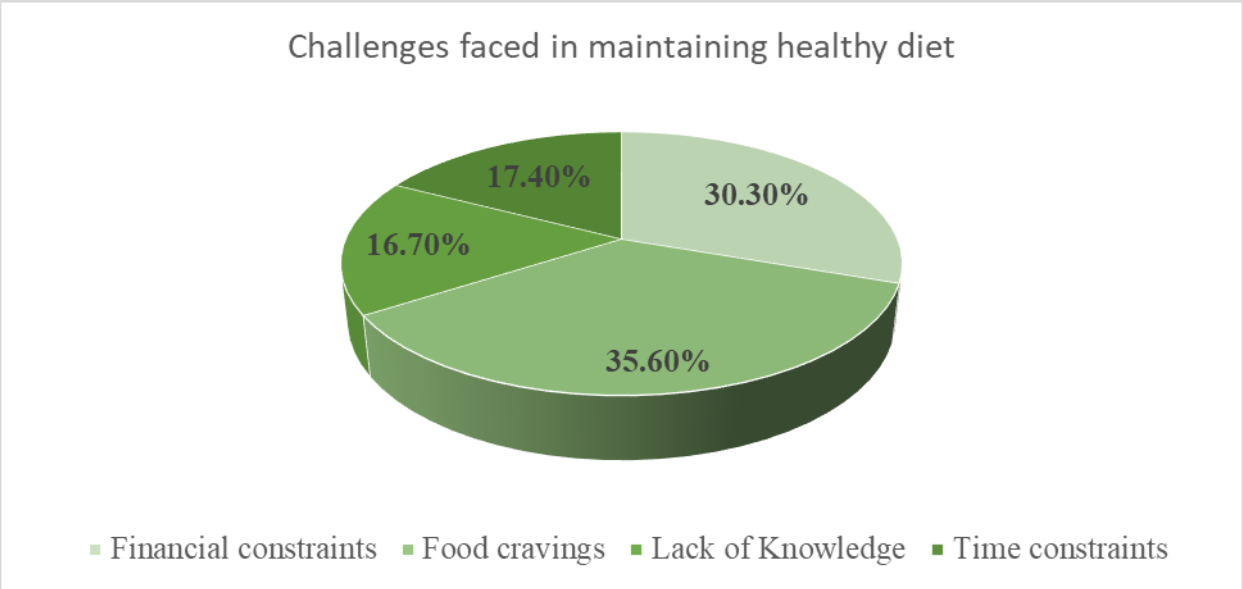

Figure 1: Distribution of respondents based on challenges faced in maintaining healthy diet

Table 3 : Knowledge of Pregnant Women about Prenatal Nutrition

S/N	Items	Yes	No
1	Have you heard about nutrition before?	122(92.4%)	10(7.6%)
2	Do you attend antenatal clinics regularly?	100(75.8%)	32(24.2%)
3	Do you see antenatal clinics as important?	116(87.9%)	16(12.1%)
4	Are prenatal vitamins important during pregnancy?	123(93.2%)	9(6.8%)

Table 3 shows the knowledge of pregnant women about prenatal nutrition. Majority of the respondents 122(92.4%) have heard about nutrition while 10(7.6%) have not heard about nutrition. 100(75.8%) of the respondents attend antenatal clinics regularly while 32(24.2%) do not regularly attend antenatal clinics. Majority of the respondents 116(87.9%) see antenatal clinics as important while 16(12.1%) do not see antenatal clinics as important. 123(93.2%) of the respondents agreed that vitamins are important during pregnancy while 9(6.8%) disagreed that vitamins are important during pregnancy.

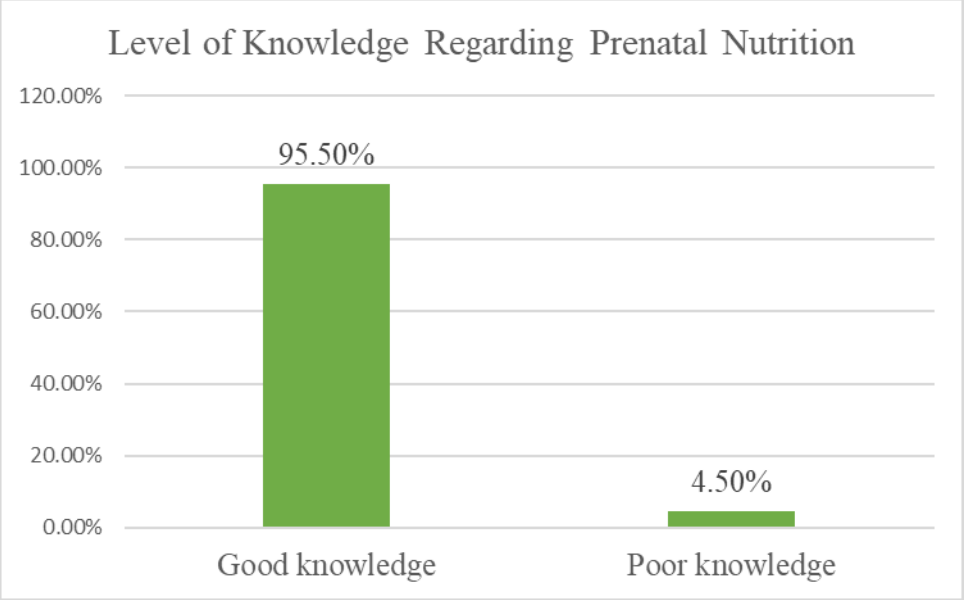

Figure 2: Level of knowledge of prenatal nutrition

Figure 2 shows the distribution of respondents based on level of knowledge regarding prenatal nutrition. The figure revealed that majority of the respondents (95.50%) has a good knowledge level of prenatal nutrition while 4.50% of the respondents have a poor knowledge of prenatal nutrition.

Table 4 : Common Sources of Information about Prenatal Nutrition

S/N	ITEMS	HOSPITAL	MARKET	MASS MEDIA	INTERNET	FRIENDS
1	The source of information	56(42.5%)	11(8.3%)	13(9.8%)	19(14.4%)	33(25.0%)
2	The source that I believe would give me the most accurate detail	45(34.1%)	15(11.4%)	14(10.6%)	22(16.7%)	36(27.3%)
3	The source whose information travels faster	67(50.8%)	16(12.1%)	8(6.1%)	13(9.8%)	28(21.2%)
4	The source that motivated me to start my antenatal	58(43.9%)	15(11.4%)	20(15.2%)	20(15.2%)	19(14.4%)

Table 4 shows the common sources of information about prenatal nutrition. The table revealed that 56(42.5%) sourced prenatal information from hospital, 11(8.3%) got information from the market, 13(9.8%) got information from mass media, 19(14.4%) got information from internet while 33(25.0%) got information from friends. 45(34.1%) of the respondents believed hospital would give the most accurate detail, 15(11.4%) of the respondents believed market would give the most accurate detail, 14(10.6%) of the respondents believed mass media would give the most accurate detail, 22(16.7%) of the respondents believed internet would give the most accurate detail while 36(27.3%) of the respondents believed friends would give the most accurate detail. 67(50.8%) agreed that hospital information travels faster, 16(12.1%) agreed that market information travels faster, 8(6.1%) agreed that mass media information travels faster, 13(9.8%) agreed that internet information travels faster while 28(21.2%) agreed that information from friends travels faster. Majority of the respondents 58(43.9%) were motivated to start antenatal by the hospital, market motivated 15(11.4%) to start antenatal, 20(15.2%) were motivated by mass

media to start antenatal, 20(15.2%) were motivated by internet to start antenatal while 19(14.4%) got motivated by friends to start antenatal.

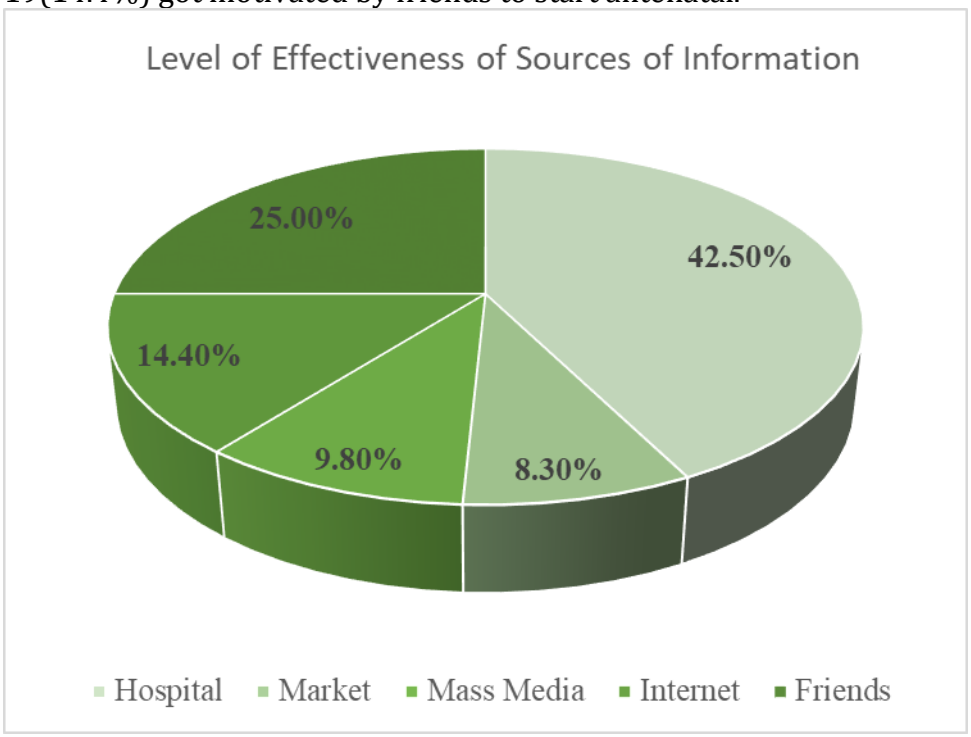

Figure 3: Level of effectiveness of sources of information

Figure 3 shows the level of effectiveness of sources of information. The figure revealed that majority of the respondents (42.50%) ranked hospital as the most effective source of information, 25% of the respondents found friends as the most effective source of information, 14.40% of the respondents shows that internet was an effective source of information, 9.80% of the respondents revealed that mass media was an effective source of information, while 8.30% of the respondents revealed that market was the least effective source of information.

Table 5 : The Practice of Adequate Prenatal Nutrition among Pregnant Women

SN	ITEMS	ALWAYS	VERY OFTEN	SOMETIMES	RARELY	NEVER
1	Do you use prenatal vitamin often?	75(56.8%)	25(18.9%)	22(16.7%)	4(3.0%)	6(4.6%)
2	Do you eat fruits often?	52(39.4%)	51(38.6%)	25(18.9%)	4(3.0%)	-
3	Do you consume whole grains, lean proteins, and healthy fats regularly?	52(39.4%)	44(33.3%)	29(22.0%)	7(5.3%)	-
4	Do you consume caffeine often?	13(9.8%)	19(14.4%)	41(31.1%)	35(26.5%)	24(18.2%)
5	Are you aware of the importance of folic acid during pregnancy?	72(54.5%)	33(25.0%)	18(13.6%)	2(1.5%)	7(5.3%)
6	Do you know the recommended daily intake of calcium and	51(38.6%)	33(25.0%)	27(20.5%)	11(8.3%)	10(7.6%)

	iron during pregnancy?					
7	Have you received guidance on healthy weight gain during pregnancy?	61(46.2%)	39(29.5%)	24(18.2%)	3(2.3%)	5(3.8%)

Table 5 shows the distribution of respondents based on the practice of adequate prenatal nutrition among pregnant women. The table revealed that 75(56.8%) of the respondents always use prenatal vitamins, 25(18.9%) of the respondents use prenatal vitamins very often, 22(16.7%) sometimes use prenatal vitamins, 4(3.0%) rarely make use of prenatal vitamins while 6(4.6%) never use prenatal vitamins. 52(39.4%) eat fruits always, 51(38.6%) eat fruits very often, 25(18.9%) eats fruits sometimes while 4(3.0%) rarely eat fruits. 52(39.4%) always consumes whole grains, lean proteins, and healthy fats, 44(33.3%) consumes whole grains, lean proteins, and healthy fats very often, 29(22.0%) sometimes consumes whole grains, lean proteins, and healthy fats, while 7(5.3%) rarely consumes whole grains, lean proteins, and healthy fats. 13(9.8%) always consume caffeine, 19(14.4%) consume caffeine very often, 41(31.1%) consume caffeine sometimes, 35(26.5%) rarely consume caffeine, while 24(18.2%) never consume caffeine. Majority of the respondents (72(54.5%)) are aware of the importance of folic acid during pregnancy. 51(38.6%) take calcium and iron always during pregnancy, 33(25.0%) takes calcium and iron very often during pregnancy, 27(20.5%) takes calcium and iron sometimes during pregnancy, 11(8.3%) rarely takes calcium and iron during pregnancy while 10(7.6%) never takes calcium and iron during pregnancy. 61(46.2%) always receive guidance on healthy weight gain during pregnancy, 39(29.5%) receive guidance on healthy weight gain during pregnancy very often, 24(18.2%) sometimes receive guidance on healthy weight gain during pregnancy, 3(2.3%) rarely receive guidance on healthy weight gain during pregnancy while 5(3.8%) never receive guidance on healthy weight gain during pregnancy.

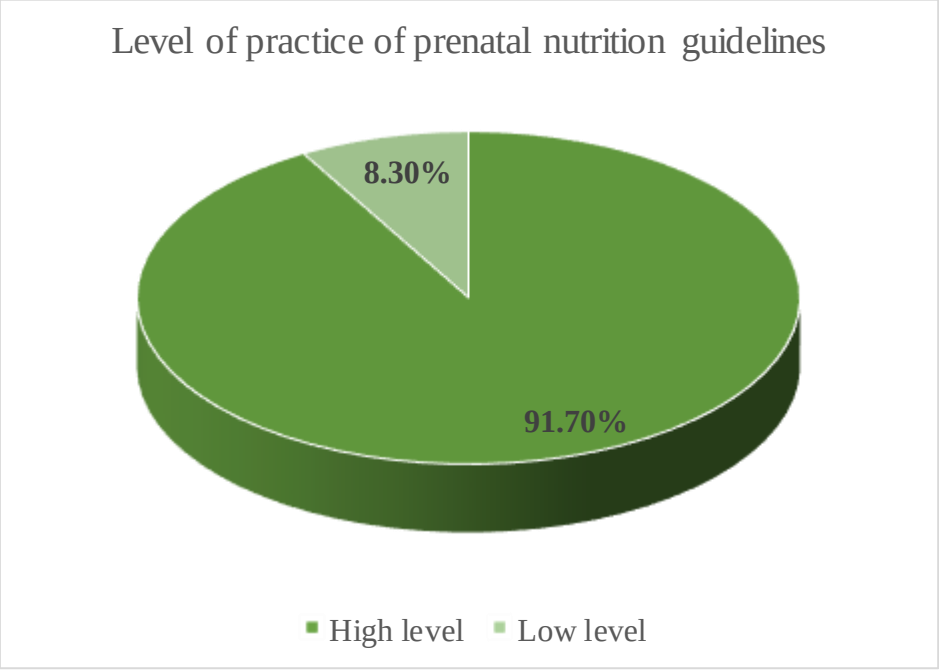

Figure 4: Level of practice of prenatal nutrition guidelines

Figure 4 shows the level of practice of prenatal nutrition guidelines. The table revealed that 91.70% of the respondents has a high level of practice while 8.30% of the respondents have a lower level of prenatal nutrition guidelines practice.

Table 6 : Assessment of Pregnant Women on the Importance of Adequate Nutrition

S/N	ITEMS	SA	A	UN	D	SD
1	Do you agree that adequate prenatal nutrition practice can enhance health baby weight?	103(78.0%)	27(20.5%)	1(0.8%)	1(0.8%)	-
2	Do you agree that adequate prenatal nutrition is essential for the mother`s health?	81(61.4%)	47(35.6%)	-	4(3.0%)	-
3	Do you agree that prenatal nutrition affects the risk of pregnancy complications?	69(52.3%)	35(26.5%)	2(1.5%)	22(16.7%)	4(3.0%)
4	Do you agree that it is important to learn about prenatal nutrition during pregnancy?	79(59.8%)	41(31.1%)	-	9(6.8%)	3(2.3%)
5	Do you agree that it is important to maintain a healthy diet during pregnancy?	97(73.5%)	28(21.2%)	2(1.5%)	5(3.8%)	-

Table 6 shows the assessment of pregnant women on the importance of adequate nutrition they know. 103(78.0%) strongly agreed that adequate prenatal nutrition practice can enhance health baby weight, 27(20.5%) agreed, 1(0.8%) undecided while 1(0.8%) disagreed that adequate prenatal adequate nutrition practice can enhance health baby weight. 81(61.4%) strongly agreed that adequate prenatal nutrition is essential for the mother`s health, 47(35.6%) agreed while 4(3.0%) disagreed that adequate prenatal nutrition is essential for the mother`s health. 69(52.3%) strongly agreed that prenatal nutrition affects the risk of pregnancy complications, 35(26.5%) agreed, 2(1.5%) undecided, 22(16.7%) disagreed while 4(3.0%) strongly disagreed that prenatal nutrition affects the risk of pregnancy complications. 79(59.8%) strongly agreed that it is important to learn about prenatal nutrition during pregnancy, 41(31.1%) agreed, 9(6.8%) disagreed while 3(2.3%) strongly disagreed that it is important to learn about prenatal nutrition during pregnancy. 97(73.5%) strongly agreed that it is important to maintain a healthy diet during pregnancy, 28(21.2%) agreed, 2(1.5%) undecided while 5(3.8%) disagreed that it is important to learn about prenatal nutrition during pregnancy.

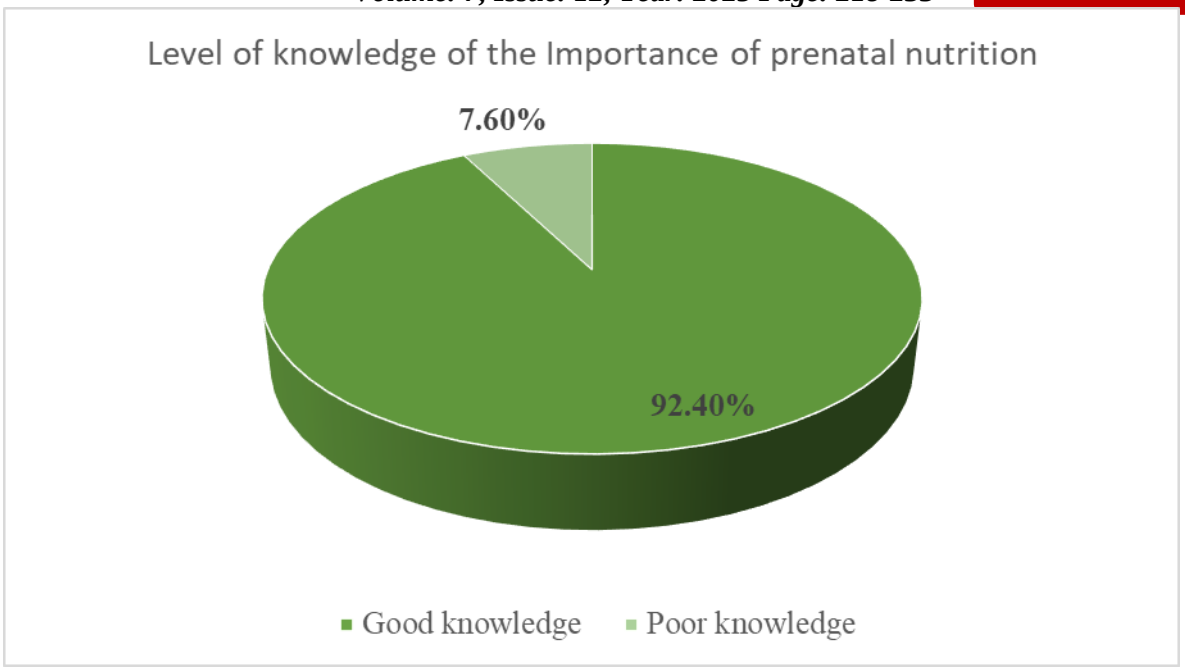

Figure 5: Level of knowledge of the importance of prenatal nutrition

Figure 5 shows the distribution of respondents based on the level of knowledge of the importance of prenatal nutrition. It revealed that 92.40% of respondents have a good knowledge of how important prenatal nutrition is during pregnancy, while 7.60% have a poor knowledge of the importance of nutrition.

Table 7 : Chi-square analysis showing the relationship between the Knowledge and Level of practice

Knowledge * Level of Practice							
		Level of practice					
				Total	X^2	D.f	P-value
		High Level	Low Level				
Knowledge	Good knowledge	115	11	126	0.579	1	0.587
	Poor knowledge	6	0	6			
	Total	121	11	132			

Table 7 shows the regression correlation between knowledge and level of practice. The table revealed that p-value (0.587) is greater than 0.05, which means knowledge and level of practice are not statistically significant.

Discussion of findings

The findings of this study provide important insights into the knowledge, perceptions, and practices of pregnant women regarding prenatal nutrition in Ado-Ekiti. A high proportion of respondents (92.4%) reported having heard about nutrition, demonstrating a strong foundational awareness that can be leveraged to promote optimal dietary practices during pregnancy. However, the observation that 24.2% of women do not attend antenatal clinics regularly is concerning, as consistent prenatal care is crucial for monitoring both maternal and fetal health and for providing timely nutrition education (Rizk, 2023). While 75.8% of respondents attend antenatal services, the remaining minority may face barriers such as financial constraints, logistical challenges, or gaps in knowledge, which need to be addressed to enhance clinic attendance rates. The generally positive perception of antenatal clinics, with

87.9% of respondents acknowledging their importance, and the high recognition of the value of prenatal vitamins (93.2%) indicate that pregnant women are largely aware of essential components of prenatal care. This knowledge is encouraging and reflects the potential for educational programs to reinforce and expand these foundational understandings (Wang, 2023).

The study also sheds light on the sources of information and their perceived effectiveness in guiding prenatal nutrition. Hospitals emerged as the primary source of information, cited by 42.5% of respondents, highlighting the critical role of healthcare providers in disseminating accurate nutrition guidance and influencing maternal health behaviors (Papežová, 2023). Friends and peers were the second most common source, reported by 25% of respondents, demonstrating the significant influence of social networks in shaping dietary habits and attitudes toward prenatal care. This finding underscores the potential of peer-based interventions to complement professional guidance. In contrast, other sources such as the internet (14.4%), mass media (9.8%), and markets (8.3%) were rated lower in effectiveness, indicating gaps in the accessibility, reliability, or perceived credibility of these channels. Given the increasing reliance on digital platforms for health information, these results suggest a need for ensuring that online resources are accurate, culturally relevant, and appropriately tailored for expectant mothers (Ojo et al., 2023b).

The assessment of dietary practices revealed both strengths and areas requiring attention. More than half of respondents (56.8%) consistently used prenatal vitamins, reflecting awareness of their role in reducing pregnancy-related risks such as neural tube defects. Consumption of fruits and whole grains was reported regularly by 39.4% of participants, while caffeine consumption occurred sometimes among 31.1%, highlighting areas where clearer guidance on safe dietary habits could improve maternal and fetal outcomes (Gebremichael & Lema, 2023). Knowledge gaps were evident in the awareness of recommended daily intakes for critical nutrients such as calcium and iron, known by only 38.6% of respondents, despite 54.5% being aware of folic acid requirements. Additionally, less than half of the participants (46.2%) reported receiving guidance on healthy weight gain during pregnancy, suggesting that while general awareness exists, detailed application knowledge remains limited (Mudasir et al., 2024). These findings indicate the importance of targeted interventions that translate general knowledge into practical, actionable behaviors.

The study further highlights perceptions of the importance of prenatal nutrition. A majority of respondents (78.0%) agreed that proper nutrition contributes to healthy infant weight, and 61.4% emphasized its role in maternal health. Additionally, 52.3% strongly believed that adequate nutrition reduces the risk of pregnancy complications, while a minority expressed uncertainty or disagreement. This underscores the need for more specific education on the health benefits of proper nutrition during pregnancy, particularly regarding micronutrient supplementation, dietary diversity, and management of weight gain (Olatona et al., 2021). The findings also demonstrate a strong interest among participants in learning about nutrition, indicating a receptive audience for interventions designed to strengthen practical understanding and improve dietary habits.

Despite the high levels of knowledge and awareness, the chi-square regression analysis revealed a p-value of 0.587, indicating no statistically significant relationship between knowledge and level of practice regarding prenatal nutrition. This result supports the acceptance of the null hypothesis, suggesting that knowledge alone does not necessarily translate into consistent or effective nutritional practices. This finding highlights the influence of additional factors, including socioeconomic constraints, accessibility of resources, behavioral motivation, and social or cultural norms, on the dietary behaviors of pregnant

women (Abioye et al., 2024; McCarthy et al., 2024). Consequently, interventions aimed at improving prenatal nutrition must go beyond knowledge dissemination, incorporating strategies that address practical barriers, reinforce behavior change, and leverage social and healthcare support systems to enhance maternal and fetal health outcomes.

Conclusion

Based on the findings of this study, it can be concluded that pregnant women in Ado-Ekiti generally possess good knowledge of prenatal nutrition and recognize its importance for both maternal health and healthy fetal development. Most respondents demonstrated awareness of essential dietary practices, the role of prenatal vitamins, and the significance of maintaining a balanced diet. Hospitals emerged as the most trusted and effective source of nutritional information, while friends and social networks also contributed to knowledge acquisition. Despite high levels of awareness and positive attitudes toward prenatal nutrition, challenges such as food cravings, financial constraints, time limitations, and gaps in specific nutrient knowledge were identified as barriers to consistently maintaining a healthy diet. Moreover, the analysis revealed that having good knowledge did not necessarily translate into optimal practice, indicating that other contextual, behavioral, and resource-related factors influence adherence to prenatal nutrition guidelines.

Recommendations

1. Antenatal care programs provide practical, culturally sensitive nutrition education that emphasizes daily implementation of dietary guidance.
2. Peer-support initiatives should be encouraged to reinforce healthy practices through social influence and shared experiences.
3. Financial barriers can be mitigated through subsidized nutrition programs or partnerships with local vendors to improve access to nutrient-rich foods.
4. Regular monitoring and evaluation of dietary practices during antenatal visits should be institutionalized to ensure sustained adherence and improved maternal and neonatal health outcomes.

References

Abioye, A.A., Owopetu, C.A., Adamu-Adedipe, F.O., Odesanya, L.O., & Olofin-Samuel, M.A. (2024). Anemia prevention among pregnant women. *International journal of nursing midwife and health related cases.* 10(12), 1-11.https://doi.org/10.37745/ijnmh.15/vol10n2111

Gebremichael, M. A., & Belachew Lema, T. (2023). Dietary Diversity, Nutritional Status, and Associated Factors Among Pregnant Women in Their First Trimester of Pregnancy in Ambo District, Western Ethiopia. *Nutrition and Metabolic Insights,* 16, 11786388231190515.

Gebremichael, M. A., & Lema, T. B. (2023). Prevalence and predictors of knowledge and attitude on optimal nutrition and health among pregnant women in their first trimester of pregnancy. *International Journal of Women's Health,* 1383–1395.

Gentry, O.A., Adelani, A.A., Borode, S.B., Olofin-Samuel, M.A. and Oyeyemi, T.A. (2025) Factors Affecting Healthy Eating in Pregnancy among Women attending Antenatal Care in Ado-Ekiti, Ekiti State, *International Journal of Quantitative and Qualitative Research Methods*, 13 (1), 1-11 doi: https://doi.org/10.37745/ijqqrm.13/vol13n1111

Gezimu, W., Bekele, F., & Habte, G. (2022). Pregnant mothers' knowledge, attitude, practice and its predictors towards nutrition in public hospitals of Southern Ethiopia: A multicenter cross-sectional study. SAGE Open Medicine, 10, 20503121221085843.

McCarthy, E. K., Ní Riada, C., O'Brien, R., Minogue, H., McCarthy, F. P., & Kiely, M. E. (2024). Access to nutrition advice and knowledge, attitudes and practices of pregnant women in Ireland: A cross-sectional study. *Journal of Human Nutrition and Dietetics.*

Mudasir, S., Muktar, E., & Oumer, A. (2024). The practice of key essential nutrition actions among pregnant women in southwest Ethiopia: Implications for optimal pregnancy outcomes. *BMC Pregnancy and Childbirth*, 24(1), 159.

Nigerian Demographic Health Survey report, 2024

Ojo, T., Jaiyesimi, B., Bamitale, T., Kukoyi, O., Oni, O., Oluwadare, T., Oluwafemi, F., Orok, E., & Akpene, G. (2023a). Exploring factors associated with healthy and unhealthy dietary choices among pregnant women attending primary healthcare centres in Delta State, Nigeria.

Ojo, T., Jaiyesimi, B., Bamitale, T., Kukoyi, O., Oni, O., Oluwadare, T., Oluwafemi, F., Orok, E., & Akpene, G. (2023b). Exploring factors associated with healthy and unhealthy dietary choices among pregnant women attending primary healthcare centres in Delta State, Nigeria.

Olatona, F. A., Olowu, O. J., Goodman, O. O., & Amu, E. O. (2021). Dietary habits, diversity, and predictors among pregnant women attending primary health care centers for antenatal care in Lagos, Nigeria. *Journal of Family Medicine and Primary Care,* 10(8), 3076–3083.

Papežová, K., Kapounová, Z., Zelenková, V., & Riad, A. (2023). Nutritional Health Knowledge and Literacy among Pregnant Women in the Czech Republic: Analytical Cross-Sectional Study. *International Journal of Environmental Research and Public Health,* 20(5), 3931.

Rizk, J., Andreou, E., Hileti, D., Ghaddar, A., & Zampelas, A. (2023). Assessing Health Care Providers' Knowledge and Practices of Nutrition during Pregnancy in Lebanon: A Cross-Sectional Study. *Medicina,* 59(8), 1471.

Wang, W.-C., Zou, S.-M., Ding, Z., & Fang, J.-Y. (2023). Nutritional knowledge, attitude and practices among pregnant females in 2020 Shenzhen China: A cross-sectional study. *Preventive Medicine Reports,* 32, 102155.

World Health Organization. (2020). WHO antenatal care recommendations for a positive pregnancy experience: Nutritional interventions update: Multiple micronutrient supplements during pregnancy.

Cite this article:

Author(s), GENTRY Oluwabukola Ayo, EDET Joseph Asuquo, IRORERE Florence Adesuwa, ATAGUBA Ilemona, OWOLABI Moyinoluwa Mary, (2025). "Knowledge and Practice of Adequate Prenatal Nutrition among Pregnant Women in Ekiti State, Nigeria", Name of the Journal: International Journal of Academic Research in Business, Arts and Science, (IJARBAS.COM), P, 218 -233 , DOI: www.doi.org/10.5281/zenodo.18053238 , Issue**:** 12, Vol.: 7, Article: 15, Month: **December**, Year: 2025. Retrieved from https://www.ijarbas.com/all-issues/

Published by

AND
ThoughtWares Consulting & Multi Services International (TWCMSI)