INTERNATIONAL JOURNAL OF NURSING SCIENCES
(ISSN: 2096-6296)
VOL.06 ISSUE01 (2026)

Research Article

Attitudes of Male Partners Toward Maternal Nutrition During Pregnancy: Evidence from Antenatal Care Attendees in Ebonyi State, Nigeria

Divine Ukamaka Omerigwe, MSc

John Hopkins Program for International Education in Gynaecology and Obstetrics, National Open University of Nigeria; and Department of Interdisciplinary Research & Statistics, PENKUP Research Institute, Birmingham, United Kingdom

Oladipo Vincent Akinmade, MPH

Digital Health and Rights Project (Centre for Interdisciplinary Methodologies, CIM), University of Warwick, Coventry, United Kingdom; and Department of Interdisciplinary Research & Statistics, PENKUP Research Institute, Birmingham, United Kingdom

Celestine Emeka Ekwuluo, MPH

Family Health International, Ukraine; and Department of Interdisciplinary Research and Statistics, PENKUP Research Institute, Birmingham, United Kingdom

Kennedy Oberhiri Obohwemu, PhD

Department of Interdisciplinary Research and Statistics, PENKUP Research Institute, Birmingham, United Kingdom

Oluwafemi Emmanuel Ooju, MSc

World Health Organisation, Abuja, Nigeria; and Department of Interdisciplinary Research & Statistics, PENKUP Research Institute, Birmingham, United Kingdom

Obiageli Uzoamaka Onyemelukwe, FWACP

Alras General Hospital, Alras, Al-Qassim, Saudi Arabia; and Department of Interdisciplinary Research and Statistics, PENKUP Research Institute, Birmingham, United Kingdom

Olukunle David Olukoti, PGDFM

Utmost Care Hospital, Ibeju-Lekki, Lagos, Nigeria; and Department of Interdisciplinary Research and Statistics, PENKUP Research Institute, Birmingham, United Kingdom

Bob-Uchenna Nwankwere, MScPH

Department of Interdisciplinary Research and Statistics, PENKUP Research Institute, Birmingham, United Kingdom

Olusegun Timothy Ojetola, MHPM

Health and Nutrition Department, Action Against Hunger, Nigeria; Department of Interdisciplinary Research and Statistics, PENKUP Research Institute, Birmingham, United Kingdom

Corresponding Author: Dr. Kennedy Oberhiri Obohwemu, PhD, Department of Interdisciplinary Studies & Statistics, PENKUP Research Institute, Birmingham, United Kingdom

Received: 06 September 2026
Revised:14 September 2026
Accepted:28 September 2026
Published: 27 October 2026

Doi: 10.55640/ijnc-06-01-04

Page No: 35-46

Copyright: © 2026 Authors retain the copyright of their manuscripts, and all Open Access articles are disseminated under the terms of the Creative Commons Attribution License 4.0 (CC-BY), which licenses unrestricted use, distribution, and reproduction in any medium, provided that the original work is appropriately cited.

ABSTRACT

Background: Maternal nutrition during pregnancy is influenced not only by women's dietary knowledge and choices but also by household attitudes and support. Male partners may influence access to nutritious foods, nutrition-related decisions and engagement with antenatal nutrition services. However, evidence specifically examining men's attitudes towards maternal nutrition remains limited in Nigeria.

Methods: A descriptive cross-sectional study was conducted among 171 respondents attending antenatal care at Azuiyiokwu Maternal and Child Health Centre, Abakaliki, Ebonyi State, Nigeria. Data were collected using a semi-structured interviewer-administered questionnaire. Attitudes towards maternal nutrition were assessed using ten four-point response items addressing balanced diets, partner support, male involvement, healthy-food expenditure, cultural and traditional beliefs, foetal health, responsibility for nutrition, and nutrition education and counselling. Descriptive statistics were used to summarise responses.

Results: Supportive attitudes were evident across several dimensions of maternal nutrition. Most respondents endorsed the importance of a balanced diet (87.7%), expressed concern about foetal health (87.7%), supported their partners in maintaining a good diet (86.0%), and believed that men should be involved in maternal nutrition (86.0%). Nutrition education as part of antenatal care was supported by 84.8%, while 82.5% encouraged their partners to attend nutrition counselling. Most respondents rejected the propositions that buying healthy food was a waste of money (74.9%), that cultural beliefs were more important than medical nutritional advice (71.9%), and that traditional herbs alone were sufficient during pregnancy (69.6%). However, 55.6% agreed that taking care of nutrition was the woman's responsibility.

Conclusion: Male partners expressed substantial support for recommended maternal nutrition, professional nutrition guidance and male involvement. However, favourable attitudes towards involvement coexisted with gendered perceptions of nutritional responsibility. Partner-inclusive antenatal nutrition interventions should therefore extend beyond encouraging male participation to promote practical, collaborative support while maintaining women's autonomy.

Keywords: Antenatal care; male involvement; male partners; maternal nutrition; nutrition counselling; pregnancy; Nigeria.

INTRODUCTION

Adequate nutrition during pregnancy is essential for meeting increased physiological demands, supporting foetal growth and maintaining maternal health. Healthy maternal diets require sufficient energy and protein, adequate micronutrient intake and dietary diversity, while nutrition counselling forms an important component of antenatal care (World Health Organization [WHO], 2023). However, a pregnant woman's ability to follow nutritional recommendations is not determined solely by individual knowledge or preference. Food purchasing, household resource allocation, cultural expectations and family relationships can influence what is available and consumed. Maternal nutrition is therefore both an individual health concern and a household issue in which partners may play an important role.

Male partners are particularly relevant where men influence household expenditure, food acquisition and healthcare decisions. Nigerian evidence indicates that gender norms surrounding household responsibilities, mobility and decision-making can affect nutritious food purchasing and engagement with nutrition counselling (Costenbader et al., 2025). These influences extend beyond financial provision. Beliefs about appropriate roles for men and women can determine whether maternal nutrition is regarded as a shared responsibility or primarily as a woman's concern. Male partners' attitudes towards maternal nutrition therefore warrant examination as a distinct dimension of pregnancy support.

Evidence from southwest Nigeria illustrates this distinction. Akinyemi and Ibrahim (2024) found that men's involvement in pregnancy care was influenced by perceptions of antenatal accompaniment and participation in pregnancy-related care, while sociocultural expectations continued to position men principally as financial providers. Similar patterns have been

identified elsewhere in Africa. An integrative systematic review covering 11 African countries identified traditional gender norms, financial pressures and exclusion from maternity services as recurring influences on fathers' involvement during pregnancy and childbirth (Cumber et al., 2024). In Cameroon, Foglabenchi et al. (2024) found that men frequently understood their roles through the identities of breadwinner, protector and provider, whereas women expected broader forms of involvement, including emotional and practical support.

Nutrition-specific evidence is less extensive but points to comparable gender dynamics. Muthiru and Bukachi (2024) found that men in low-income communities in Nairobi contributed to maternal and child nutrition through financial provision and food purchasing, yet nutrition and caregiving could still be perceived as predominantly female responsibilities. This distinction is important because providing household resources does not necessarily indicate acceptance of shared responsibility for maternal dietary care. A partner may value maternal and foetal health while remaining disengaged from decisions concerning dietary quality, nutrition counselling or appropriate food choices.

Evidence from southeastern Nigeria also highlights the relevance of partner engagement in maternal nutrition (Omerigwe et al., 2026). However, knowledge of recommended maternal nutritional requirements provides only a partial understanding of partner involvement. Awareness of appropriate dietary practices does not necessarily translate into favourable attitudes towards shared nutritional responsibility, support for nutrition counselling, or active participation in nutrition-related decision-making. Examining attitudes therefore complements existing knowledge-based evidence by providing insight into how male partners perceive their responsibilities and involvement in supporting maternal nutrition during pregnancy.

Attitudes provide an important conceptual basis for understanding these differences. The Theory of Planned Behaviour proposes that behavioural intentions are shaped by attitudes towards a behaviour, subjective norms and perceived behavioural control (Ajzen, 1991). Applied to maternal nutrition, favourable attitudes towards balanced diets, expenditure on healthy foods and partner involvement may strengthen willingness to provide nutritional support. Subjective norms are equally important because such attitudes operate within culturally defined expectations of masculinity, pregnancy and household responsibility. Perceived behavioural control further recognises that supportive intentions may be constrained by income, time or access to appropriate foods.

Evidence from nutrition interventions supports the relevance of this behavioural perspective. A theory-based intervention involving male partners in Ethiopia improved dietary diversity and maternal nutritional status among pregnant women (Tsegaye et al., 2022). Subsequent analysis found improved birth weight following nutrition education involving male partners, with dietary diversity mediating part of the intervention effect (Tsegaye et al., 2023). These findings do not imply that favourable attitudes alone determine maternal dietary behaviour, but they demonstrate that male partners can be meaningfully engaged in nutrition-specific interventions.

Individual attitudes must nevertheless be situated within wider social norms. Costenbader et al. (2025) identified gendered norms affecting maternal, infant and young child nutrition behaviours across Nigeria's six geopolitical zones, including norms surrounding household tasks, nutritious food purchasing and access to nutrition counselling. The presence of exceptions to these norms also indicated that established expectations are not necessarily fixed. Male attitudes towards maternal nutrition may consequently represent an important point at which conventional gender roles and more collaborative understandings of pregnancy support intersect.

Health services provide one setting in which these attitudes may be influenced. Across sub-Saharan Africa, cultural expectations, insufficient maternal health knowledge, economic constraints and health-system factors have been identified as important barriers to male involvement (Moyo et al., 2024). A meta-analysis from Ethiopia similarly found greater antenatal involvement among men exposed to health education and among those with better knowledge of antenatal care and pregnancy danger signs (Abebe et al., 2024). Couple-oriented antenatal approaches may therefore create opportunities for engagement. Qualitative research in Mozambique found that scheduled couple consultations increased men's interest in pregnancy and childbirth, although established gender norms continued to influence participation (Galle et al., 2025).

Greater male involvement should not, however, be equated automatically with improved maternal autonomy. Supportive participation differs fundamentally from control over women's healthcare and dietary decisions. Nigerian evidence demonstrates that relationships between male involvement, intimate partner violence and maternal healthcare utilisation vary according to the form of involvement examined (Adetutu et al., 2024). Nutrition interventions should therefore encourage collaborative support without transferring authority over women's health decisions to their partners.

Cultural beliefs surrounding food add another dimension to male attitudes. Food restrictions and taboos during pregnancy remain prevalent in parts of sub-Saharan Africa. Belew et al. (2025), in a systematic review and meta-analysis of 58 studies involving 20,262 pregnant women, estimated a pooled prevalence of food taboo practices of 41%. Maternal nutrition knowledge and antenatal care were among the factors associated with these practices. Because dietary beliefs are often socially transmitted within households and communities, partners may reinforce or challenge them depending on their attitudes towards traditional practices and professional nutritional advice.

Despite increasing attention to male involvement in maternal health, much of the literature continues to operationalise involvement through antenatal attendance, birth preparedness, financial provision, facility delivery or broad measures of pregnancy support (Cumber et al., 2024; Moyo et al., 2024). Nutrition-specific male involvement remains less extensively investigated (Muthiru & Bukachi, 2024), while comparatively little attention has been given to the attitudes that may precede supportive nutritional behaviour. This distinction is analytically important. Valuing a balanced maternal diet does not necessarily imply acceptance of shared nutritional responsibility, willingness to prioritise expenditure on nutritious foods, rejection of potentially restrictive dietary beliefs, or support for professional nutrition counselling.

Evidence addressing these attitudinal dimensions remains limited in southeastern Nigeria, including Ebonyi State. Understanding how male partners evaluate maternal nutrition can identify supportive beliefs that may be reinforced through antenatal care while revealing gendered or culturally embedded attitudes that could constrain nutritional support. Accordingly, this study examined attitudes of male partners toward maternal nutrition during pregnancy among antenatal care attendees in Ebonyi State, Nigeria, focusing on beliefs concerning balanced diets, partner support, expenditure on healthy foods, male responsibility, cultural and traditional nutritional practices, foetal wellbeing, and nutrition education and counselling.

METHODS

Study design and setting

A descriptive cross-sectional survey was conducted at Azuiyiokwu Maternal and Child Health (MCH) Centre in Abakaliki Local Government Area, Ebonyi State, Nigeria. Azuiyiokwu is a semi-urban community within Abakaliki metropolis. The MCH centre operates as a primary healthcare facility under the Ebonyi State Primary Healthcare Development Agency and provides antenatal care, delivery services, immunisation, family planning and nutrition counselling. Services are delivered by nurses, midwives, community health extension workers and visiting medical officers, and the facility operates six days per week.

The cross-sectional design permitted assessment of attitudes towards maternal nutrition among respondents attending the facility during the study period. Reporting was guided by the STROBE recommendations for observational studies (von Elm et al., 2007).

Study population and eligibility

The study population comprised pregnant women attending antenatal care at Azuiyiokwu MCH Centre and their intimate partners. Pregnant women in any trimester attending antenatal care during the data-collection period were eligible, as were husbands or cohabiting male partners who were willing to participate. Pregnant women were excluded where medical complications made participation inadvisable, as determined by attending clinicians. Women or partners who were unable to provide informed consent were also excluded.

Sample size and sampling

Clinic records indicated an average monthly antenatal attendance of approximately 300 pregnant women. The sample size was calculated using Yamane's finite-population formula, n=N/[1+N(e2)], with a population of 300 and a precision level of 5%. This yielded a required sample of 171 respondents.

Systematic random sampling was used for participant selection. Dividing the estimated clinic population by the required sample produced a sampling interval of approximately two. Accordingly, every second eligible pregnant woman on the antenatal attendance list was approached until the required sample was attained. Selected women were encouraged to invite their intimate partners to participate. Male partners who attended the clinic were approached directly.

Data collection instrument and measurement of attitudes

Data were collected using a semi-structured, interviewer-administered questionnaire. The instrument incorporated sociodemographic characteristics and domains addressing maternal nutrition and partner involvement. For the present analysis, the outcome of interest was male partners' attitudes towards maternal nutrition, assessed using ten statements addressing beliefs, perceived importance and support for maternal nutrition.

The attitude items assessed beliefs concerning the importance of a balanced diet during pregnancy, the relative importance of cultural beliefs and medical nutritional advice, support for a partner in maintaining an appropriate diet, male involvement in maternal nutrition, expenditure on healthy foods, reliance on traditional herbs, concern for foetal health, women's responsibility for their own nutrition, inclusion of nutrition education within antenatal care, and encouragement of partners to attend nutrition counselling. Responses were recorded on a four-point Likert scale ranging from strongly disagree to strongly agree. Negatively phrased items were interpreted in the opposite direction when characterising the attitudinal pattern so that endorsement of statements favouring cultural beliefs over medical advice, viewing healthy food as a waste of money, reliance on traditional herbs alone, or assigning sole nutritional responsibility to women was not treated as evidence of a favourable attitude.

Validity and reliability

Content validity was assessed by three experts with expertise in public health nutrition, maternal health and biostatistics. Their review considered the clarity, relevance and coverage of questionnaire items, and the instrument was refined following their comments.

Reliability was evaluated through a pre-test involving 20 pregnant women and their partners at a different MCH facility in Abakaliki that was not included in the main survey. A test-retest procedure was used, with the questionnaire administered to the same participants on two occasions separated by two weeks. The resulting reliability coefficient was 0.60.

Data collection

Data collection took place over four weeks. A research assistant fluent in English and Igbo was trained in the study procedures, ethical requirements and questionnaire administration. Eligible participants were approached following their routine antenatal consultations, provided with information about the study and asked to provide informed consent. Interviews were conducted privately. Where literacy difficulties were encountered, questionnaire items were read aloud and responses recorded by the interviewer. When male partners were not present at the facility, return visits were arranged or telephone interviews were undertaken where feasible.

Statistical analysis

Data were cleaned, coded and analysed using IBM SPSS Statistics version 26.0. The present analysis was restricted to sociodemographic characteristics and the ten attitude indicators relevant to male partners' attitudes towards maternal nutrition. Frequencies and percentages were calculated for categorical variables and individual response categories, while means and standard deviations were used to summarise the Likert-scale attitude responses.

Given the directional wording of the items, interpretation considered item content rather than treating a higher raw mean as uniformly more favourable. Higher agreement represented a favourable orientation for positively framed statements, whereas lower agreement represented the favourable direction for negatively framed statements concerning cultural beliefs, unnecessary expenditure on healthy food and reliance on traditional herbs.

Ethical considerations

Ethical clearance was obtained from the Ebonyi State Ministry of Health Research and Ethics Committee, and permission to conduct the study was obtained from the management of Azuiyiokwu MCH Centre. Participants received information about the purpose and procedures of the research before providing informed consent. Confidentiality and voluntary participation were maintained, and participants were informed of their right to withdraw without adverse consequences.

RESULTS

A total of 171 respondents were included in the analysis. Table 1 summarises the sociodemographic profile. Nearly half were aged 26–35 years (48.0%), while 26.3% were aged 18–25 years. Most were married (80.1%). Secondary education was the most frequently reported educational level (39.2%), followed by tertiary education (34.5%). Traders constituted 31.0% of respondents, and 70.2% identified as Christian.

Table 1: Sociodemographic characteristics of respondents (N = 171)

Characteristic	Category	n	%
Age (years)	18–25	45	26.3
	26–35	82	48.0
	36–45	32	18.7
	46+	12	7.0
Marital status	Married	137	80.1
	Cohabiting	34	19.9
Educational level	No formal education	24	14.0
	Primary	21	12.3
	Secondary	67	39.2
	Tertiary	59	34.5
Occupation	Trader	53	31.0
	Unemployed	42	24.6
	Civil servant	38	22.2
	Farmer	23	13.5
	Other	15	8.8
Religion	Christianity	120	70.2
	Islam	46	26.9
	Traditional religion	5	2.9

Note: Percentages are based on N = 171.

Attitudes towards maternal nutrition are presented in Table 2. Agreement was strongest for concern about the baby's health (150/171, 87.7%) and the importance of a balanced diet during pregnancy (150/171, 87.7%). Support for male involvement in maternal nutrition and support for a partner in maintaining a good diet were each endorsed by 147 respondents (86.0%). Nutrition education as part of antenatal care was endorsed by 145 (84.8%), while 141 (82.5%) reported encouraging their partner to attend nutrition counselling.

Table 2: Distribution of responses to maternal nutrition attitude items (N = 171)

Attitude item	SA, n	A, n	D, n	SD, n	M	SD
1. Balanced diet is important	90	60	14	7	3.37	0.82
2. Cultural beliefs > medical advice	20	28	78	45	2.01	0.96
3. Support partner in maintaining good diet	82	65	16	8	3.29	0.85
4. Men should be involved in maternal nutrition	88	59	15	9	3.32	0.83
5. Healthy food is a waste of	18	25	80	48	2.00	0.94

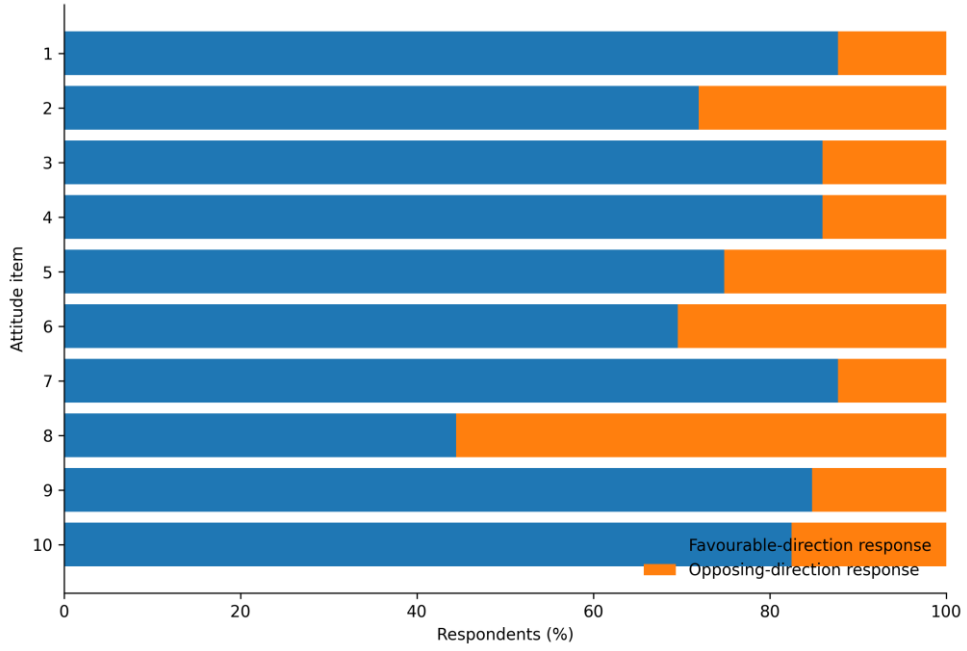
money						
6. Traditional herbs are enough	22	30	70	49	2.05	0.98
7. Concerned about baby's health	95	55	14	7	3.39	0.81
8. Nutrition is the woman's responsibility	40	55	50	26	2.63	1.02
9. Nutrition education should be part of ANC	85	60	18	8	3.30	0.84
10. Encourage partner to attend nutrition counselling	76	65	20	10	3.21	0.88

Note: SA = strongly agree; A = agree; D = disagree; SD = strongly disagree; M = mean. Items 2, 5, 6 and 8 are negatively framed; their raw means should therefore be interpreted in the opposite attitudinal direction.

The negatively framed statements showed a different response pattern. Most respondents disagreed or strongly disagreed that buying healthy food for a pregnant woman was a waste of money (128/171, 74.9%), that cultural beliefs were more important than medical nutritional advice (123/171, 71.9%), and that traditional herbs were sufficient during pregnancy (119/171, 69.6%). The statement assigning nutritional care to the woman alone produced the least favourable distribution: 95 respondents (55.6%) agreed or strongly agreed, whereas 76 (44.4%) disagreed or strongly disagreed.

Figure 1 displays the favourable-direction response proportion for each item after accounting for item wording. The largest favourable proportions were recorded for concern about foetal health and the importance of a balanced diet (87.7% each), followed by support for partner dietary care and male involvement (86.0% each). The responsibility item was the only indicator for which the favourable-direction proportion was below 50% (44.4%).

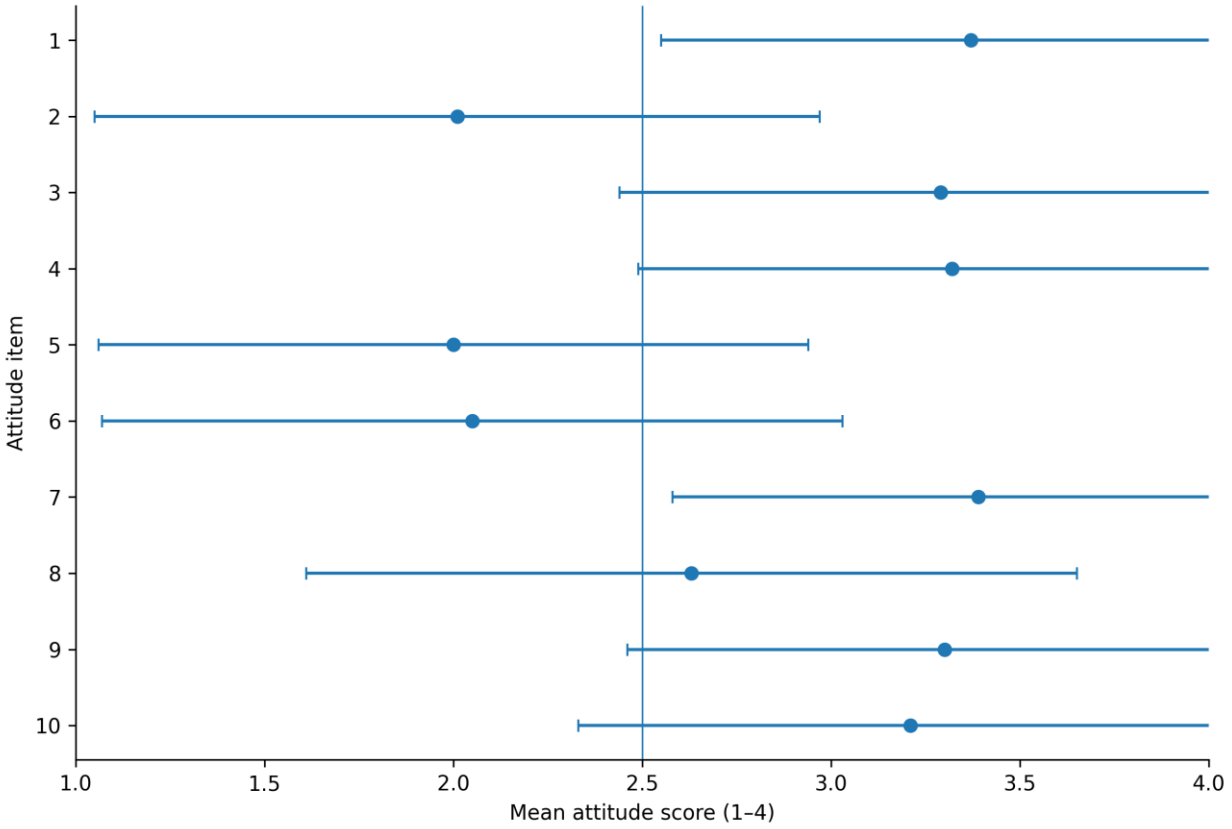
Figure 1: Favourable-direction response profile across maternal nutrition attitude items (N = 171)



Note: For negatively worded items (2, 5, 6 and 8), disagreement/strong disagreement represents the favourable direction. Item numbers correspond to Table 2.

Mean item scores are shown in Figure 2. Among positively framed items, mean scores ranged from 3.21 to 3.39, with the highest score for concern about the baby's health (M = 3.39, SD = 0.81). The negatively framed items concerning cultural beliefs, expenditure on healthy food and traditional herbs had raw means of 2.01, 2.00 and 2.05, respectively. The woman-only responsibility item had a higher raw mean (M = 2.63, SD = 1.02) and the largest standard deviation among the ten indicators.

Figure 2: Mean attitude scores with standard deviations across the ten items (N = 171)



Note: Scores are raw item means on the four-point response scale. The vertical reference line at 2.50 is shown only as the scale midpoint; no validated classification threshold was applied.

DISCUSSION

The findings reveal a distinctive pattern in male partners' attitudes towards maternal nutrition. Strong majorities endorsed balanced diets, expressed concern for foetal health, supported male involvement in maternal nutrition and favoured nutrition education during antenatal care. Most respondents also rejected the propositions that healthy food represented wasteful expenditure, that cultural beliefs should take precedence over professional nutritional advice, and that traditional herbs were sufficient during pregnancy. Yet this broadly supportive orientation was accompanied by a marked gender-role inconsistency: 55.6% agreed that women were responsible for taking care of their own nutrition. Rather than representing a uniformly favourable or unfavourable attitude profile, the findings indicate that support for maternal nutrition can coexist with conventional beliefs about who bears primary responsibility for achieving it.

This distinction is particularly important when the findings are situated within evidence from southeastern Nigeria. In rural Ebonyi communities, Eze et al. (2023) found that men strongly recognised women's need for rest and special nutrition during pregnancy, while some other forms of participation in maternity care received substantially weaker support. Their community-participatory intervention subsequently improved several dimensions of men's perceptions and practices. The present findings extend that local evidence by demonstrating that positive orientations towards maternal nutrition are not confined to recognition that pregnancy creates additional nutritional needs. High proportions also endorsed active male involvement, dietary support and nutrition counselling. Nevertheless, the simultaneous attribution of nutritional

responsibility to women indicates that favourable perceptions of maternal nutrition should not automatically be interpreted as endorsement of equal or shared responsibility.

A similar discrepancy between positive perceptions and actual role construction has been observed elsewhere in Nigeria. Erhabor et al. (2021) reported that 80.4% of men in Benin City had positive attitudes towards maternity care, whereas only 27.2% were actively involved. Falade-Fatila and Adebayo (2020) likewise found that most married men in Ibadan believed they had roles during pregnancy, labour and newborn care, yet attendance with partners at antenatal and postnatal clinics remained comparatively uncommon. These studies address maternity care more broadly rather than nutrition specifically, but they provide an important interpretive caution: expressed approval of male involvement is not equivalent to enacted involvement. The present findings should consequently be understood as evidence about attitudinal orientation, not as evidence that respondents routinely purchased nutritious foods, attended counselling or participated in dietary decision-making.

The tension surrounding responsibility is particularly revealing. Agreement that men should participate in maternal nutrition reached 86.0%, yet more than half of respondents also regarded nutritional care as the woman's responsibility. Nigerian evidence suggests that such apparently contradictory positions can be accommodated within established constructions of masculinity. In a mixed-method study in western Nigeria, Okafor et al. (2022) found that male involvement in maternal and child health was shaped by traditional and cultural orientation, financial constraints and patriarchal understandings of men's roles. Their qualitative findings showed how male authority and provider identities could coexist with recognition of men's responsibilities for maternal and child health. The present results suggest a related distinction within nutrition: men may accept a supporting role without necessarily regarding dietary care as a jointly owned household responsibility.

This interpretation is strengthened by evidence from rural south-eastern Nigeria, which suggests that male involvement in maternal care may remain constrained by prevailing gender expectations. Eze et al. (2023) reported that men were less likely to view accompanying their partners to antenatal care as part of their expected role, although targeted interventions improved both perceptions and participation in maternity care activities. The findings suggest that men's involvement may be shaped by sociocultural understandings of appropriate male responsibilities. Financial provision, encouragement and concern for foetal health can fit comfortably within conventional provider identities, whereas assuming day-to-day responsibility for nutrition may cross a more firmly gendered boundary. The comparatively unfavourable response to the woman-only responsibility item in the present study is therefore analytically important because it identifies a dimension of attitude that would be concealed if male involvement were represented by a single favourable-attitude label.

The results concerning expenditure provide a complementary perspective. Almost three-quarters rejected the proposition that buying healthy food for a pregnant woman was a waste of money. This suggests that expenditure on maternal nutrition was generally regarded as legitimate. Yet willingness to value nutritious food should be distinguished from the household capacity to obtain it. Recent Nigerian evidence shows that maternal dietary quality remains sensitive to socioeconomic circumstances. Babah et al. (2025), using nationally representative Demographic and Health Survey data, demonstrated substantial regional differences in anaemia and dietary diversity among pregnant women and cautioned against reducing maternal nutritional status to dietary diversity alone. The practical significance of favourable male attitudes will therefore depend partly on whether households possess sufficient resources and food access to convert nutritional priorities into dietary choices.

The rejection of cultural beliefs over professional advice and of reliance on traditional herbs alone also deserves careful interpretation. It would be inappropriate to conclude that cultural influences were absent simply because most respondents rejected two explicitly worded statements. Pregnancy-related food beliefs are embedded within wider systems of family advice, perceived risk and inherited dietary practice. Nigerian research among antenatal attendees in Lagos State found a significant relationship between nutritional knowledge and dietary practices, while cultural food beliefs were also documented within the study population (Jembi et al., 2023). More broadly, recent synthesis of African pregnancy dietary practices shows that avoidance of protein-rich foods, fruits, vegetables and other foods continues to occur for culturally specific reasons, including beliefs about difficult labour or harm to the infant. These practices are socially situated rather than reducible to individual ignorance. Consequently, the present findings are better interpreted as evidence that most respondents expressed a preference for professional nutritional guidance when it was placed in direct opposition to cultural or traditional alternatives.

The high endorsement of nutrition education within antenatal care and encouragement to attend nutrition counselling provides a potentially important route for intervention. However, merely providing information may be insufficient where

gender expectations determine who is expected to receive, interpret and act upon nutritional advice. Evidence from male engagement interventions supports a more participatory approach. In Ebonyi State, Eze et al. (2023) demonstrated that community advocacy, education of male partners and locally organised support mechanisms were followed by improvements in men's perceptions and several safe-motherhood practices. Earlier intervention research in southern Nigeria similarly showed that communication strategies built around local cultural understandings and gender roles could facilitate more constructive male engagement (Adeleye et al., 2011). These findings suggest that changing attitudes may require engagement with the social meaning of male participation rather than nutrition information alone.

Nutrition-specific intervention evidence points in the same direction. Tsegaye et al. (2022) found that theory-guided nutrition education involving husbands was associated with substantially greater dietary diversity among pregnant women than routine care, alongside improvement in maternal nutritional status. The importance of this evidence lies less in direct comparability with the present cross-sectional findings than in demonstrating that male engagement can be operationalised around concrete nutritional behaviours. Thus, antenatal counselling could move beyond generic messages that men should "support" pregnant partners towards specific expectations concerning access to diverse foods, shared meal planning, attendance at nutrition counselling and facilitation of recommended supplementation. Such behavioural specificity may be particularly important where respondents endorse male involvement abstractly while retaining female-centred conceptions of nutritional responsibility.

Health services themselves may also influence whether favourable attitudes become meaningful participation. Nigerian evidence shows that barriers to male involvement do not arise solely within households. Falade-Fatila and Adebayo (2020) identified employment demands, social stigma and lengthy waiting times as constraints, while recent qualitative evidence from obstetric caregivers in Ekiti State indicates that provider and service-level conditions can also complicate efforts to involve men in antenatal and labour care. An intervention that encourages male participation without considering clinic organisation, work schedules and whether men feel welcome in maternal-health spaces may therefore achieve little behavioural change despite favourable underlying attitudes.

The findings also have implications for how male involvement is conceptualised. Greater participation should not be equated with greater male authority over women's dietary choices. In patriarchal household settings, inviting men into maternal nutrition programmes without an explicit gender-sensitive orientation could unintentionally reinforce men's control of household resources or health decisions. Okafor et al. (2022) demonstrated that male involvement in Nigerian maternal and child health is embedded within existing relations of household authority. Consequently, partner-inclusive nutrition interventions should frame men as facilitators of women's nutritional wellbeing and autonomy rather than as decision-makers whose approval is required for recommended dietary behaviour.

Several limitations require consideration. The cross-sectional design permits description of attitudes at one point in time but cannot establish whether these attitudes preceded, resulted from, or translated into supportive nutritional behaviour. Self-reported responses to socially desirable propositions, particularly concern for foetal health and willingness to support a pregnant partner, may also be susceptible to social desirability bias. The single-facility setting limits transferability to men who do not engage with antenatal services and to communities with different socioeconomic or cultural characteristics. More importantly, the item-level data demonstrate heterogeneity across attitudinal dimensions, but no independently validated psychometric classification was available to justify collapsing these responses into a single positive-versus-negative attitude construct. The absence of a reportable correlation coefficient and exact probability value for the proposed attitude-support relationship further means that no inferential claim about that association can be sustained.

The contribution of the findings therefore lies in the structure of the attitudes observed rather than in a simple claim that attitudes were positive. Support for healthy maternal diets, foetal wellbeing, professional nutritional guidance and male participation was widespread, but responsibility for nutritional care remained more strongly gendered. This divergence matters because programmes based only on general male approval may overlook the beliefs that determine who is expected to undertake nutritional work within the household. In southeastern Nigeria, strengthening male engagement in maternal nutrition may therefore require a dual approach: reinforcing existing support for appropriate nutrition while directly addressing the assumption that responsibility for achieving it belongs primarily to pregnant women.

CONCLUSION

Male partners demonstrated substantial support for key principles of maternal nutrition. Most endorsed balanced diets, male involvement, nutrition education and counselling, expressed concern for foetal health, and rejected the view that expenditure on healthy foods was unnecessary. Cultural beliefs and reliance on traditional herbs were also generally not

preferred over professional nutritional guidance.

An important distinction nevertheless emerged between support for maternal nutrition and responsibility for maternal nutrition. Although 86.0% endorsed male involvement, 55.6% also agreed that women were responsible for taking care of their own nutrition. Favourable attitudes towards maternal nutrition therefore did not consistently translate into a conception of nutritional care as a shared responsibility.

Maternal nutrition programmes should build on the existing willingness of men to provide support while addressing gendered assumptions about responsibility within the household. Partner-inclusive antenatal counselling may provide an appropriate platform for promoting practical and collaborative nutritional support, provided that women's autonomy remains central. Further research using validated multidimensional measures and participant-level data is needed to determine whether particular attitudes predict supportive nutritional behaviours and how these relationships vary across socioeconomic and demographic groups.

AUTHOR CONTRIBUTION

All authors played a substantive role in shaping this study and developing the manuscript. D.U.O. and O.V.A. conceptualised the study and designed the overall research framework. The authors collaboratively analysed, interpreted, and validated the findings, with each author contributing to the discussions that informed the final results. O.U.O. and K.O.O. prepared the initial manuscript draft, covering the introduction, methods, results and discussion. Co-authors strengthened the analysis, provided detailed revisions, and enhanced the clarity and coherence of the final manuscript. All authors reviewed and approved the final manuscript and accept responsibility for the accuracy and integrity of the work.

CONFLICTS OF INTEREST

The authors declare no conflicts of interest.

FUNDING

This research did not receive any grant from funding agencies in the public, commercial, or not-for-profit sectors.

ACKNOWLEDGEMENT

The authors would like to acknowledge the management and technical staff of PENKUP Research Institute, Birmingham, United Kingdom, for their excellent assistance and for providing manuscript writing/editorial support in accordance with Good Publication Practice (GPP3) guidelines.

REFERENCES

1. Abebe, G. F., Alie, M. S., Alelign, Z., Negesse, Y., Lemu, L. G., & Girma, D. (2024). Male involvement in antenatal care follow-up and its determinants in Ethiopia: A systematic review and meta-analysis. BMJ Open, 14(12), e083492. https://doi.org/10.1136/bmjopen-2023-083492
2. Adeleye, O. A., Aldoory, L., & Parakoyi, D. B. (2011). Using local culture and gender roles to improve male involvement in maternal health in southern Nigeria. Journal of Health Communication, 16(10), 1122–1135. https://doi.org/10.1080/10810730.2011.571340
3. Adetutu, O. M., Oyinlola, F. F., Oyelakin, T. E., & Ofili, F. L. (2024). Influence of intimate partner violence and male involvement on maternal healthcare services utilisation in Nigeria. Frontiers in Global Women's Health, 5, 1353117. https://doi.org/10.3389/fgwh.2024.1353117
4. Ajzen, I. (1991). The theory of planned behavior. Organizational Behavior and Human Decision Processes, 50(2), 179–211. https://doi.org/10.1016/0749-5978(91)90020-T
5. Akinyemi, A. O., & Ibrahim, E. A. (2024). Prevalence and predictors of men's involvement in pregnancy care in Modakeke, Southwest Nigeria. Frontiers in Global Women's Health, 5, 1337094. https://doi.org/10.3389/fgwh.2024.1337094
6. Babah, O. A., Sagastume, D., Akinajo, O. R., Scarpa, G., Hanson, C., Larsson, E. C., Afolabi, B. B., & Beňová, L. (2025). Dietary diversity insufficiently explains differences in prevalence of anaemia in pregnancy across regions in Nigeria: A secondary analysis of Demographic and Health Survey 2018. PLOS Global Public Health, 5(5), e0004540. https://doi.org/10.1371/journal.pgph.0004540

7. Belew, A. K., Mengistu, B., Lakew, A. M., & Muhammad, E. A. (2025). Food taboo practices and associated factors among pregnant women in Sub-Sahara Africa: A systematic review and meta-analysis. Journal of Health, Population and Nutrition, 44, 24. https://doi.org/10.1186/s41043-025-00770-0
8. Costenbader, E., Memmott, C., Litvin, K., Green, M., Mba-Oduwusi, N., Offiaeli, I., & Hajeebhoy, N. (2025). Gendered social norms, exceptions, and sanctions: Implications for maternal, infant, and young child nutrition in Nigeria. Current Developments in Nutrition, 9(1), 104524. https://doi.org/10.1016/j.cdnut.2024.104524
9. Cumber, S. N., Williams, A., Elden, H., & Bogren, M. (2024). Fathers' involvement in pregnancy and childbirth in Africa: An integrative systematic review. Global Health Action, 17(1), 2372906. https://doi.org/10.1080/16549716.2024.2372906
10. Erhabor, J. O., Okpere, E., Lawani, L. O., Omozuwa, E. S., & Eze, P. (2021). A community-based assessment of the perception and involvement of male partners in maternity care in Benin-City, Nigeria. Journal of Obstetrics and Gynaecology, 41(3), 401–407. https://doi.org/10.1080/01443615.2020.1753182
11. Eze, I. I., Ossai, E. N., Akamike, I. C., Okedo-Alex, I. N., Ogbonnaya, L. U., & Uneke, C. J. (2023). Males' perceptions and practices towards maternity care in rural southeast Nigeria: Policy implication of participatory action research for safe motherhood. PLOS ONE, 18(3), e0282469. https://doi.org/10.1371/journal.pone.0282469
12. Falade-Fatila, O., & Adebayo, A. M. (2020). Male partners' involvement in pregnancy related care among married men in Ibadan, Nigeria. Reproductive Health, 17, 14. https://doi.org/10.1186/s12978-020-0850-2
13. Foglabenchi, L. H., Stöckl, H., & Marchant, T. (2024). 'I am a father but not pregnant': A qualitative analysis of the perspectives of pregnant couples on male partner role during pregnancy care in Bamenda, Cameroon. Reproductive Health, 21, 195. https://doi.org/10.1186/s12978-024-01928-5
14. Galle, A., Maguele, M. S., Maxlhusa, E., Aguacheiro, D., Krüger, T., & de Melo, M. (2025). Scheduled couple consultations during pregnancy as a lever to increase male involvement in maternal health: results of a qualitative photovoice study in Mozambique. International Health, 17(5), 778-789. https://doi.org/10.1093/inthealth/ihaf027
15. Jembi, R. O., Emmanuel, A. A., & Ibraheem, A. T. (2023). Nutritional knowledge and cultural food beliefs on dietary practices of pregnant women. International Journal of Home Economics, Hospitality and Allied Research, 2(2), 162–172. https://www.ajol.info/index.php/ijhehar/article/download/261959/247306/620664
16. Moyo, E., Dzinamarira, T., Moyo, P., Murewanhema, G., & Ross, A. (2024). Men's involvement in maternal health in sub-Saharan Africa: A scoping review of enablers and barriers. Midwifery, 133, 103993. https://doi.org/10.1016/j.midw.2024.103993
17. Muthiru, A. W., & Bukachi, S. A. (2024). Male involvement in maternal and child nutrition in low-income informal settlements, Nairobi, Kenya. Journal of Health, Population and Nutrition, 43, 47. https://doi.org/10.1186/s41043-023-00476-1
18. Okafor, I. P., Chukwudi, C. L., Igwilo, U. U., & Ogunnowo, B. E. (2022). "Men are the head of the family, the dominant head": A mixed method study of male involvement in maternal and child health in a patriarchal setting, Western Nigeria. PLOS ONE, 17(10), e0276059. https://doi.org/10.1371/journal.pone.0276059
19. Omerigwe, D. U., Akinmade, O. V., Ekwuluo, C. E., Obohwemu, K. O., Yakpir, G. M., Iyevhobu, K. O., ... & Daniel-Clement, P. O. (2026). Knowledge of Recommended Maternal Nutritional Needs Among Pregnant Women and Their Partners Attending Antenatal Care in Abakaliki, Nigeria. American Academic Journal, 14-26. https://academicpublishers.net/index.php/aaj/article/view/143
20. Tsegaye, D., Tamiru, D., & Belachew, T. (2022). Theory-based nutrition education intervention through male involvement improves the dietary diversity practice and nutritional status of pregnant women in rural Illu Aba Bor Zone, Southwest Ethiopia: A quasi-experimental study. Maternal & Child Nutrition, 18(3), e13350. https://doi.org/10.1111/mcn.13350
21. Tsegaye, D., Tamiru, D., & Belachew, T. (2023). Effect of a theory-based nutrition education intervention during pregnancy through male partner involvement on newborns' birth weights in Southwest Ethiopia: A three-arm community based quasi-experimental study. PLOS ONE, 18(1), e0280545. https://doi.org/10.1371/journal.pone.0280545
22. von Elm, E., Altman, D. G., Egger, M., Pocock, S. J., Gøtzsche, P. C., & Vandenbroucke, J. P. (2007). The Strengthening the Reporting of Observational Studies in Epidemiology (STROBE) statement: Guidelines for reporting observational studies. The Lancet, 370(9596), 1453–1457. https://doi.org/10.1016/S0140-6736(07)61602-X
23. World Health Organization. (2021). WHO antenatal care recommendations for a positive pregnancy experience. Nutritional interventions update. Available at: https://www.who.int/publications/b/59023 [Accessed: 22/05/2026]