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An Assessment of Socioeconomic Disparities and Child Feeding Practices among Mothers and Caregivers of Under-Five Children in Kogi State, Nigeria

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Abstract

Child malnutrition remains a persistent public health challenge in Nigeria, with socioeconomic disparities among caregivers identified as a key structural driver of poor nutritional outcomes among children under five. This study assessed the socioeconomic status of mothers and caregivers of under-five children, determined the child feeding and care practices prevailing in Kogi State, Nigeria, and examined the relative weight of socioeconomic disparities in shaping children's nutritional and welfare status. Bronfenbrenner's Ecological Systems Theory provided the theoretical foundation. A survey research design was adopted, with 400 mothers and caregivers selected through multi-stage sampling across four Local Government Areas, of which 390 responses were usable. Data were analysed using frequencies, percentages, means, and standard deviations against a criterion mean of 3.00, and hypotheses were tested by multiple linear regression using extreme-group indicators of income and education. Findings revealed a predominantly low socioeconomic profile, with 66.7% of households earning below sixty thousand naira monthly and 84.6% of caregivers holding secondary education or below. Feeding practices recorded a cumulative mean of 3.48, caregivers sustaining exclusive breastfeeding, meal frequency, and hygienic preparation while falling short on dietary diversity and adherence to professional guidance. Neither regression model was significant, $F(4, 385) = 0.76, p = .553$ and $F(4, 385) = 1.42, p = .227$, and both null hypotheses were retained, though extreme low income significantly predicted welfare status, indicating a threshold rather than gradient effect. The study concludes that the binding constraint on child nutrition is material rather than informational, and recommends income support of sufficient magnitude to clear extreme poverty.

Introduction

Child undernutrition remains among the most persistent challenges confronting households and health systems across sub-Saharan Africa. In 2024, an estimated 150.2 million children under five years of age were stunted, while 42.8 million were wasted and 35.5 million were overweight (UNICEF, WHO, & World Bank Group, 2025). Progress toward the 2030 Sustainable Development Goal targets remains badly off course, with only about a quarter of countries on track to halve stunting, and sub-Saharan Africa standing as the only region where the absolute number of stunted children continues to rise. These figures are ordinarily read as public health statistics, yet they describe something further: a vast population of children whose households have been left to absorb, unaided, the costs of structural disadvantage. Undernutrition on this reading signals that families have exhausted their coping

capacity and that the social systems surrounding them have not compensated, which locates the problem as much in the distribution of household resources as in the availability of food itself.

The proposition that socioeconomic conditions govern child nutritional outcomes is well established. Bradley and Corwyn (2002) demonstrated that income, educational attainment, and access to material and social resources collectively shape the conditions under which children are born, grow, and develop, influencing parental feeding decisions, healthcare utilisation, and the overall quality of care provided within households. The consequences extend well beyond childhood: Alderman, Hoddinott, and Kinsey (2006) established that early childhood malnutrition depresses adult height and completed schooling, creating cycles of disadvantage that are difficult to reverse. This



orientation has crystallised in recent years around the concept of child welfare inequalities, which Bywaters et al. (2015) define as arising when children or their parents encounter unequal chances, experiences, or outcomes in ways systematically tied to structural social disadvantage, and therefore both unjust and avoidable. The same scholarship observes a consistent social gradient, whereby children's chances of adverse outcomes rise step by step with each increase in household and neighbourhood deprivation.

Nigeria illustrates the pattern with painful clarity. The Federal Ministry of Health and Social Welfare of Nigeria, National Population Commission, and ICF (2025) report that under-five mortality has declined to 110 deaths per 1,000 live births, down from 132 in 2018, yet neonatal mortality remains almost unchanged at 41 deaths per 1,000 live births, and only 39% of children aged twelve to twenty-three months are fully vaccinated against basic antigens. Progress has therefore been real but shallow, and it has not touched the earliest and most vulnerable period of life. These aggregate figures also conceal a steep social gradient. Nwosu and Ataguba (2020) aver that household wealth and maternal education rank among the most powerful determinants of child undernutrition in Nigeria, with belonging to the poorest wealth quintile carrying substantially elevated odds of stunting and wasting relative to the wealthiest households. What emerges is not a random distribution of misfortune but precisely the patterned gradient the inequalities literature describes.

The measurement of child deprivation in Nigeria has advanced in ways that make these disparities visible. The National Bureau of Statistics (2022) reports a Nigeria Multidimensional Poverty Index incorporating a linked Child Multidimensional Poverty Index, which adds a dimension of child survival and development comprising eight indicators, among them severe undernutrition, immunisation, breastfeeding, childcare, and birth attendance. The survey indicates that 63% of Nigerians, some 133 million people, are multidimensionally poor; that multidimensional poverty is markedly higher in rural areas at 72% compared with 42% in urban areas; and that two-thirds of children aged zero to seventeen are multidimensionally poor. Significantly, these estimates are disaggregated to senatorial district level, offering an empirical architecture within which state-level and sub-state inequalities can be meaningfully examined. Yet the analytic attention has not followed the measurement, and sub-national evidence remains thin.

Kogi State presents a compelling and underexplored setting for such an examination. Situated at Nigeria's confluence and spanning three senatorial districts, the state encompasses both agrarian rural communities and urban centres, with substantial internal variation in livelihood security, parental education, and proximity to health and welfare services. Households across the state contend with income instability, agricultural dependency, and uneven access to the social protection instruments notionally available to them. Yet despite these conditions, systematic inquiry into how socioeconomic disparities within Kogi State shape the feeding and care practices that determine child nutritional outcomes remains conspicuously scarce. Existing Nigerian scholarship has largely operated at national or zonal scale, or has approached the question

from an orientation that documents prevalence without illuminating the household practices through which structural disadvantage is finally expressed in what a child eats.

It is this gap that the present study addresses. The study assesses the socioeconomic status of mothers and caregivers of under-five children in Kogi State, determines the child feeding and care practices prevailing among them, and examines the relative weight of specific socioeconomic disparities in shaping children's nutritional and welfare status. In distinguishing between those dimensions of child feeding that depend chiefly on caregiver time and effort and those that depend on household expenditure, the study seeks to establish not merely that disadvantage exists but where precisely it binds, and thereby to generate evidence capable of informing whether nutrition programming in the state should prioritise the material circumstances of households or the knowledge of the caregivers within them.

Statement of the Problem

Despite growing global and national attention to child nutrition, Kogi State continues to grapple with persistent malnutrition among children under five, a situation that remains poorly understood at the sub-national level. While evidence from national surveys consistently links poor child nutritional outcomes to socioeconomic disparities such as low household income, limited maternal education, and inadequate access to healthcare, most existing studies have focused on national or regional aggregates, leaving the specific dynamics operating within Kogi State largely unexamined (Nwosu & Ataguba, 2020; National Bureau of Statistics, 2022). The state's characteristic mix of rural poverty, income instability, and uneven access to social services creates conditions likely to produce and sustain nutritional vulnerability among children, yet empirical evidence documenting these dynamics within the state remains scarce.

A further limitation attends the existing evidence. Studies in this field have largely established that disadvantage depresses child nutritional outcomes in the aggregate, without establishing which dimensions of feeding and care give way first under material constraint, or which specific disparity carries the greatest weight when several are examined together. The distinction matters for practice, since a deficit rooted in caregiver knowledge and one rooted in household resources call for entirely different responses, and the choice between nutrition education and income support turns upon evidence of precisely this kind. This gap in context-specific knowledge limits the ability of policymakers and programme implementers to design targeted interventions that reflect the actual socioeconomic realities of households in the state. It is against this backdrop that this study assesses the socioeconomic status of mothers and caregivers in Kogi State, determines the child feeding and care practices prevailing among them, and examines the relative weight of specific socioeconomic disparities in shaping children's nutritional and welfare status.

Research Questions

This study is guided by the following research questions:



1. What is the socioeconomic status of mothers and caregivers of under-five children in Kogi State, Nigeria?
2. What are the child feeding and care practices prevailing among mothers and caregivers in Kogi State, Nigeria?
3. What is the influence of socioeconomic disparities on children's nutritional and welfare status in Kogi State, Nigeria?

Aim and Objectives of the Study

The aim of this study is to assess the relationship between socioeconomic status and child nutrition practices among mothers and caregivers in Kogi State, Nigeria. Specifically, the study seeks to:

1. Ascertain the socioeconomic status of mothers and caregivers of under-five children in the study area.
2. Determine the child feeding and care practices prevailing in the study area.
3. Examine the influence of socioeconomic disparities on children's nutritional and welfare status in the study area.

Literature Review

Socioeconomic Disparities

Socioeconomic disparities refer to systematic differences in the distribution of income, education, occupation, and access to resources and opportunities among individuals and groups within society. Bradley and Corwyn (2002) observe that although several ways of measuring socioeconomic status have been proposed, most incorporate some quantification of family income, parental education, and occupational standing, and that its effects on children's health, cognitive, and socioemotional outcomes begin before birth and continue into adulthood. The construct therefore extends beyond income alone to encompass inequalities in job security, social protection, and access to public services, making it a multidimensional phenomenon with wide-ranging consequences for human wellbeing. The National Bureau of Statistics (2022) gives empirical expression to this multidimensionality in the Nigerian context, reporting that 63% of Nigerians are multidimensionally poor and that deprivation is markedly higher in rural areas, at 72%, than in urban areas, at 42%.

In the context of child nutrition, socioeconomic position determines the capacity of caregivers to provide adequate food, seek healthcare, and maintain supportive feeding environments. Uthman (2009), decomposing socioeconomic inequality in childhood malnutrition in Nigeria, found that household economic status alone accounted for 31% of the inequality observed, with maternal education contributing a further 13% and proper sanitation 11%. Nwosu and Ataguba (2020) similarly establish that household wealth ranks among the most powerful determinants of child undernutrition in the country, children in the poorest quintile facing substantially elevated odds of stunting and wasting relative to the wealthiest. Adedokun and Yaya (2021), analysing Demographic and Health Survey data across 31 sub-Saharan African countries, confirm that adverse child nutritional status is concentrated among households of lower socioeconomic standing

throughout the region, indicating that the Nigerian pattern reflects a wider continental one rather than a national peculiarity.

Child Feeding and Care Practices

Child feeding and care practices refer to the feeding behaviours, dietary habits, and caregiving approaches adopted to meet the nutritional needs of children, particularly during the first one thousand days of life. Cusick and Georgieff (2016) describe this period as the golden opportunity for brain development, during which nutritional adequacy exerts effects that later intervention cannot fully reverse. These practices extend beyond what children eat to encompass how, when, and where feeding takes place, together with the hygiene conditions under which food is prepared. Black and Hurley (2017) draw attention in particular to responsive feeding, the reciprocal interaction in which a caregiver recognises and answers a child's hunger and satiety cues, arguing that the quality of the feeding interaction is as consequential as the content of the meal.

Optimal practice is generally understood to comprise exclusive breastfeeding for the first six months, timely introduction of complementary foods, dietary diversification, and hygienic preparation. Attainment of these standards remains limited across low- and middle-income settings. Baye and Kennedy (2020), examining dietary quality among children aged six to twenty-three months across 49 low- and middle-income countries, found that the great majority failed to achieve minimum acceptable diet, with dietary diversity the dimension most commonly unmet. Scarpa et al. (2022) reported a comparable pattern in Uganda, where only 22% of children reached the minimum acceptable diet threshold despite general improvement in complementary feeding indicators, and where household wealth was significantly associated with both dietary diversity and meal frequency. Bain et al. (2013) attribute such shortfalls in sub-Saharan Africa to a combination of household poverty, food insecurity, and constrained access to health services rather than to any single cause, a reading consistent with the Nigerian evidence reported by Ekholuenetale et al. (2020).

Maternal Education and Child Nutrition

Maternal education is widely recognised as among the most important determinants of child nutrition, functioning as a pathway through which mothers acquire health literacy and the capacity to make informed feeding decisions. Akombi et al. (2019), analysing Nigeria Demographic and Health Survey data from 2003 to 2013, identified maternal education at the no-education level as a key contributor to childhood undernutrition, alongside household wealth at the poorest category and rural residence. Lawal et al. (2024) similarly found maternal education and maternal nutritional status to be significant predictors of child nutritional outcomes in Nigeria. Beyond the transmission of knowledge, education improves economic opportunity, enabling women to afford the nutritious foods and healthcare services that support healthy development, so that its effect operates through material as well as informational channels.

The relationship is not, however, straightforward, and recent evidence cautions against treating maternal knowledge as the

binding constraint. Fadare et al. (2019), examining the association between mothers' nutrition-related knowledge and child nutrition outcomes in Nigeria, found that knowledge alone was insufficient to secure improved outcomes where household resources were lacking. This finding carries direct implications for programming, since it suggests that nutrition education directed at caregivers may address a deficit that is not, in resource-constrained households, the operative one. The distinction between practices sustained by knowledge and effort and those requiring household expenditure therefore merits closer examination than the literature has generally afforded it, and it is this distinction that the present study takes up.

Review of Empirical Studies

Menon et al. (2018) conducted a study assessing contributors to reductions in stunting at subnational levels across four states in India between 2006 and 2016. The study employed a mixed-methods approach using public datasets, literature review, policy analyses, and stakeholder interviews to interpret changes in the context of policies, programmes, and enabling environments. Findings showed that primary contributors to stunting reduction were improvements in health and nutrition intervention coverage ranging between 11% and 23%, household conditions contributing 22% to 47%, and maternal factors accounting for 15% to 30% of the reduction. The study revealed that policy and programme actions to address the multidimensional determinants of stunting reduction occurred across sectors addressing poverty, food security, education, health services, and nutrition programmes. The study recommended that effective stunting reduction requires implementing multisectoral actions with equity, quality, and intensity, with assured convergence on the same geographies and households.

Akombi et al. (2019) examined trends in socioeconomic inequalities in child undernutrition in Nigeria, analysing cross-sectional data from the Nigeria Demographic and Health Survey from 2003 to 2013. The outcome variables were stunting, wasting, and underweight among children under five years of age, with socioeconomic factors contributing to child undernutrition determined using the decomposition method. Findings showed that the concentration index revealed an increase in childhood wasting and underweight in Nigeria over time, with key contributing factors including maternal education at the no-education level, household wealth at the poorest category, rural residence, and location in the North East and North West geopolitical zones. The study concluded that addressing child undernutrition in Nigeria requires improving maternal education and adopting effective social protection policies, especially in rural communities. This study is particularly relevant to the present study as it situates the Nigerian context and highlights the same socioeconomic variables that are central to this investigation.

Zere and McIntyre (2003) assessed the magnitude of inequalities in under-five child malnutrition attributable to socioeconomic status in South Africa, employing a cross-sectional design using data on 3,765 under-five children from the Living Standards and Development Survey. Household income, proxied by per capita household expenditure, served as the main indicator of

socioeconomic status, while socioeconomic inequality in stunting, underweight, and wasting was measured using the illness concentration index. Results showed that stunting was the most prevalent form of malnutrition, with the highest rates recorded in the Eastern Cape and Northern Province, which were also the provinces with the highest concentration of poverty. Considerable pro-rich inequalities were found in the distribution of stunting and underweight, confirming that malnutrition disproportionately affected the poorest households. The study concluded that significant differences in under-five child malnutrition existed that favoured the richest in society and were unnecessary, avoidable, and unjust.

Scarpa et al. (2022) assessed child feeding practices among children aged 6 to 23 months in Uganda using the 2016 Ugandan Demographic and Health Survey data, which included 5,485 children. The study evaluated predictors of minimum meal frequency and minimum dietary diversity using multivariable logistic regression models stratified by age. Findings showed improvement in complementary feeding practice indicators compared to the past, although only 22% of children reached the minimum acceptable diet threshold. Health status, vaccination status, and household wealth were significantly and positively associated with dietary diversity and meal frequency, while children failing to achieve complementary feeding indicators were primarily based in the northern regions of Uganda. The study concluded that improving nutrition in infants and young children is a priority, and recommended that urgent nutritional policies and acceptable interventions are needed to guarantee nutritious and age-appropriate complementary foods to each child in the first years of life.

Uthman (2009) measured and decomposed socioeconomic inequality in childhood malnutrition in Nigeria using nationally representative data from 4,187 under-five children drawn from the 2003 Nigeria Demographic and Health Survey. Household socioeconomic status was measured using principal component analysis, while the concentration index of childhood malnutrition was decomposed into its determining factors. Findings showed that the largest contributions to inequality in childhood malnutrition were household economic status at 31%, health service index at 17%, maternal education at 13%, and proper sanitation at 11%, with breastfeeding duration, geopolitical region, and rural or urban residency also proving important contributors. The study concluded that socioeconomic inequality in childhood malnutrition in Nigeria is determined not only by health system functions but also by factors beyond the scope of health authorities. The study recommended scaling up a universal approach linking the Ministry of Health and the Ministry of Education with other ministries to reduce inequalities in the social determinants of childhood malnutrition.

Huang et al. (2022) conducted a retrospective cohort study exploring the effects of breastfeeding during the first four months of life on thinness, overweight, and obesity among children aged three to six years in eastern China, following 8,053 subjects classified into breastfeeding, mixed feeding, and formula feeding

groups. Using multivariate logistic regression models adjusted for sex, age, maternal education, and caretaker, the study found that breastfeeding participants had a significantly lower risk of overweight and of overweight or obesity combined compared with formula-fed children, with adjusted odds ratios of 0.652 and 0.721 respectively. The prevalence of breastfeeding was 63.8%, while overweight and obesity combined reached 15.9% among the study population. The study confirmed the protective effect of breastfeeding against overweight and obesity, while finding no significant difference between mixed and formula feeding in terms of weight outcomes. These findings reinforce the importance of breastfeeding as a critical child nutrition practice with measurable long-term health implications.

Gap in literature

While the reviewed studies provide valuable insights into the relationship between socio-economic status and child nutrition practices across various contexts, most of them are situated outside Nigeria or focus on national and multi-country aggregates that obscure state-level dynamics (Menon et al., 2018; Van de Poel et al., 2008; Scarpa et al., 2022; Huang et al., 2022). Even the Nigeria-based studies by Akombi et al. (2019) and Uthman (2009) rely on national survey data that do not capture the specific socio-economic and contextual realities of Kogi State. Furthermore, existing studies largely treat socio-economic disparities and child nutrition practices as separate variables without exploring their interplay within a single resource-limited state context. This study therefore fills this gap by empirically examining how socio-economic status shapes child nutrition practices specifically among mothers and caregivers in Kogi State, Nigeria.

Theoretical Framework

This study is grounded on the assumptions of the Ecological Systems Theory. The theory, propounded by Bronfenbrenner (1979), holds that human development does not occur in isolation but is shaped by a layered set of environmental systems, each nested within the next and each exercising a distinct degree of influence over the individual. The theory is anchored on five such systems: the microsystem, comprising the immediate settings in which the person directly participates, such as the household and the caregiver relationship; the mesosystem, comprising the linkages between those settings, such as the connection between a household and a primary healthcare facility; the exosystem, comprising settings in which the person does not participate but which affect them nonetheless, such as parental employment, household income, and the design of social protection programmes; the macrosystem, comprising the cultural values, belief systems, and socioeconomic structures that pattern how the inner systems operate; and the chronosystem, which introduces the dimension of time and the accumulation of advantage or disadvantage across the life course. In its mature formulation, Bronfenbrenner and Morris (2006) placed proximal processes, the enduring reciprocal interactions between the developing person and their immediate environment, at the centre of the framework, describing them as the engines of development.

In relation to this study, the theory situates children's nutritional and welfare outcomes within the nested conditions that surround them rather than within caregiver disposition alone. At the microsystem level, it directs attention to the household, where feeding practice, hygiene, and the economic capacity to provide a varied diet are determined. At the exosystem level, it frames the influence of the informal livelihoods, irregular incomes, and limited educational attainment documented among the caregivers in this study, conditions in which the child never participates yet which govern the resources available for their care. The proximal processes of feeding and daily caregiving are the mechanisms through which these distal socioeconomic conditions are finally expressed in what a child eats. The theory therefore provides the explanatory logic for the study's central proposition, namely that variation in child feeding practice reflects the material circumstances of the household rather than the knowledge or commitment of the caregiver.

Methodology

The survey research design was adopted for this study to obtain the views of mothers and caregivers of under-five children in Kogi State, Nigeria, on the research problem. The population of the study consisted of all mothers and caregivers of children under five years of age residing across the twenty-one Local Government Areas of the state. Because reliable statistics disaggregated for this subgroup are unavailable at state and local government levels, the general projected population of Kogi State, totalling 4,466,800 according to National Population Commission projections, was adopted as the reference population, an approach consistent with Deshpande and Ogbuonji (2024). Based on this population, the Taro Yamane (1967) formula was used to determine a sample size of 400 respondents, calculated at a margin of error of 5%. A questionnaire containing structured categorical items and five-point Likert-scale statements was used as the instrument for data collection.

A multi-stage sampling technique was employed to ensure systematic and representative selection of respondents. In the first stage, the state was stratified into its three senatorial districts, namely Kogi East, Kogi Central, and Kogi West. In the second stage, simple random sampling was used to select four Local Government Areas from the twenty-one — namely Ankpa, Okene, Lokoja, and Yagba West. In the third stage, the sample of 400 was distributed proportionately across these four areas on the basis of their population figures, giving 115 respondents to Ankpa, 140 to Okene, 85 to Lokoja, and 60 to Yagba West. In the fourth stage, two communities were selected from each Local Government Area, yielding eight communities in total, and the respondents allocated to each area were distributed across its two communities. Within each community, systematic random sampling was used to select households with under-five children until the allocated quota was achieved. Of the 400 copies of the questionnaire distributed face-to-face with the support of trained research assistants, 398 were retrieved and 390 were properly completed and found usable, giving an effective response rate of 97.5%. The validity of the instrument was established through face and content validity by

lecturers in the Department of Social Work and experts in public health and nutrition research, while reliability was established through a pilot test of 40 copies, yielding Cronbach's alpha coefficients of .92, .89, and .91 across the three item clusters.

The method of analysis involved frequency tables and percentages, as well as mean scores and standard deviations, with a decision rule that statements with mean values of 3.00 and above were accepted, while those below 3.00 were rejected. The hypotheses were tested using multiple linear regression, selected in preference to a test of association because the study sought to determine not merely whether socioeconomic status is related to child outcomes but which dimensions of disparity carry the greatest weight. Household income and maternal education were recoded into extreme-group indicators — low income (below ₦30,000 monthly), high income (above ₦100,000), no formal education,

and higher education — each entered simultaneously as predictors against a reference group of all other respondents, with nutritional status and welfare status computed as composite means of the relevant Likert items. All tests were conducted at the .05 level of significance.

Results

Of the 400 copies of the questionnaire distributed, 398 were retrieved, representing a response rate of 99.5%, and 390 were properly completed and found usable for the substantive analyses, giving an effective response rate of 97.5%. All analyses reported below are based on these 390 usable responses, and are presented in the order of the study's three objectives.

Objective One: Socioeconomic Status of Mothers and Caregivers

Table 1: Distribution of Respondents by Demographic and Socioeconomic Characteristics (N = 390)

Variable	Category	f	%
Age of mother/caregiver	18–25 years	76	19.5
	26–35 years	181	46.4
	36–45 years	109	27.9
	46 years and above	24	6.2
Marital status	Married	333	85.4
	Single	27	6.9
	Divorced/separated	18	4.6
	Widowed	12	3.1
Educational level	No formal education	89	22.8
	Primary education	115	29.5
	Secondary education	126	32.3
	NCE/OND	37	9.5
	HND/Bachelor's degree and above	23	5.9
Occupation	Trading	168	43.1
	Farming	124	31.8
	Small-scale business/artisan	52	13.3
	Civil service/salaried employment	31	7.9
	Casual labour/irregular jobs	15	3.8

Variable	Category	f	%
Average monthly household income	Less than ₦30,000	138	35.4
	₦30,001 – ₦60,000	122	31.3
	₦60,001 – ₦100,000	82	21.0
	Above ₦100,000	48	12.3

Note. Percentages are calculated within each variable and may not total exactly 100.0 due to rounding.

Table 1 presents the combined demographic and socioeconomic profile of the 390 mothers and caregivers. Nearly half of the respondents, 46.4%, fell within the 26 to 35 age band, the prime childbearing and childrearing years, followed by those aged 36 to 45 at 27.9%, those aged 18 to 25 at 19.5%, and those aged 46 years and above at 6.2%. The overwhelming majority, 85.4%, were married, reflecting the predominantly marital context of childbearing in the state, while single, divorced or separated, and widowed caregivers together made up the remaining 14.6%.

The educational profile reveals a population of low to moderate schooling. Some 22.8% had no formal education, 29.5% had primary education, and 32.3% had secondary education, so that 84.6% had secondary education or below, while only 15.4% held a post-secondary qualification. Occupationally, respondents were overwhelmingly located in the informal economy: trading at 43.1% and farming at 31.8% together accounted for three-quarters of the sample, followed by small-scale business or artisanal work at 13.3%, salaried or civil service employment at 7.9%, and casual or irregular labour at 3.8%.

Households commonly combined more than one income-generating activity rather than depending upon a single occupation. When asked to indicate every applicable source of household

livelihood, the 390 respondents returned 664 responses, an average of approximately 1.7 sources per household, most frequently combining farming or trading with a secondary small-scale activity. Such diversification signals both resilience and chronic insecurity, since none of the dominant sources offers the stability or employment-linked social protection that would reliably buffer a child against nutritional risk.

Household income was similarly concentrated at the lower end of the distribution. More than a third of respondents, 35.4%, reported average monthly household earnings below thirty thousand naira, and a further 31.3% earned between thirty thousand and sixty thousand naira, so that two-thirds of households, 66.7%, subsisted on less than sixty thousand naira per month. Those earning between sixty thousand and one hundred thousand naira made up 21.0%, while the group earning above one hundred thousand naira was the smallest at 12.3%. Taken together, these findings confirm a population of predominantly low socioeconomic status, in which the majority of caregivers command household resources that leave little margin for the varied, nutrient-rich diets and timely health-seeking that child wellbeing requires.

Objective Two: Child Feeding and Care Practices

Table 2: Child Feeding and Care Practices of Mothers and Caregivers (N = 390)

Item	SA	A	N	D	SD	n	M	SD	Decision
I ensure my under-five child eats meals at least three times a day	142	163	48	26	11	390	4.02	1.00	Accepted
I provide my under-five child with a variety of foods from different food groups regularly	48	87	92	118	45	390	2.94	1.22	Rejected
I include fruits and vegetables in my under-five child's meals daily	36	76	87	134	57	390	2.74	1.20	Rejected
I practise exclusive breastfeeding for my child during the first six months of life	178	154	32	18	8	390	4.22	0.93	Accepted
I prepare my under-five child's meals in a hygienic and safe	156	171	38	19	6	390	4.16	0.90	Accepted

Item	SA	A	N	D	SD	n	M	SD	Decision
manner									
I follow health workers' advice on child feeding practices to improve my child's nutrition	52	73	76	121	68	390	2.79	1.30	Rejected
Cumulative mean							3.48		

Note. SA = strongly agree; A = agree; N = neutral; D = disagree; SD = strongly disagree. Criterion mean = 3.00. Items with a mean of 3.00 or above were accepted; those falling below were rejected.

Table 2 presents the feeding and care practices of mothers and caregivers, with a cumulative mean of 3.48 against a criterion mean of 3.00 on the five-point scale. Three of the six items were accepted and three rejected, revealing a caregiving population that succeeds at the practices requiring commitment and knowledge alone but falls short at those requiring money. Meal frequency was accepted at 4.02, exclusive breastfeeding at 4.22, and hygienic meal preparation at 4.16, all practices that depend chiefly on maternal time and effort rather than household expenditure.

The rejected items tell a different story. Dietary diversity was rejected at 2.94 and daily fruit and vegetable intake at 2.74.

Rejection at the group level does not mean that no respondent practised these behaviours: 135 respondents agreed or strongly agreed that they provided varied food groups, and 112 reported including fruits and vegetables daily. What the means indicate is that across the sample as a whole, agreement fell below the criterion because a larger number of caregivers disagreed. The pattern is instructive, since dietary diversity is precisely the dimension of child feeding that costs money, and its rejection sits consistently alongside the finding that two-thirds of these households subsist on less than sixty thousand naira per month. The rejection of the item on following health workers' advice, at 2.79, points to a weak link between the household and the formal health system.

Objective Three: Influence of Socioeconomic Disparities on Children's Nutritional and Welfare Status

Table 3: Factors Influencing Child Welfare and Nutrition as Identified by Respondents (N = 390)

Item	SA	A	N	D	SD	n	M	SD	Decision
My household income affects my ability to provide nutritious food for my under-five child	218	147	13	9	3	390	4.46	0.74	Accepted
My level of education influences how I feed and care for my under-five child	192	156	25	13	4	390	4.33	0.82	Accepted
Cultural beliefs or traditions in my community influence what my under-five child eats	41	68	79	134	68	390	2.69	1.24	Rejected
The availability of diverse and nutritious foods in my area affects my child's diet	203	151	21	11	4	390	4.38	0.80	Accepted
Advice and guidance from health workers influence my child's feeding practices	87	119	88	71	25	390	3.44	1.20	Accepted
Illness or health challenges in my child affect their nutrition and meal intake	209	145	22	10	4	390	4.40	0.79	Accepted

Item	SA	A	N	D	SD	n	M	SD	Decision
Cumulative mean							3.95		

Note. SA = strongly agree; A = agree; N = neutral; D = disagree; SD = strongly disagree. Criterion mean = 3.00.

Table 3 presents the factors respondents identified as influencing their children's welfare and nutrition, with a cumulative mean of 3.95 against the criterion of 3.00. Five of the six items were accepted. Household income recorded the highest mean at 4.46 with the lowest standard deviation at 0.74, indicating both strong agreement and high consensus, followed by child illness at 4.40, food availability at 4.38, and maternal education at 4.33. That caregivers themselves place income and food availability at the head of the list corroborates the central premise of this study, namely that child nutritional outcomes are conditioned by the material circumstances of the household rather than by caregiver disposition alone.

The item on advice from health workers was accepted but recorded the lowest mean among the accepted items at 3.44 and the widest dispersion at 1.20, indicating that respondents differed considerably in how far professional guidance shapes their practice. Taken with the rejection of the corresponding item in Table 2, this points to uneven contact between households and the health system. Cultural beliefs were rejected at 2.69, the only item below the criterion, indicating that respondents did not, on the whole, regard tradition as a determining influence on what their children eat. It should be noted that this establishes only that culture was not identified as a governing factor; the instrument did not test whether cultural influence has been displaced by economic considerations, and no such displacement should be inferred.

Test of Hypotheses

To determine which specific dimensions of socioeconomic disparity carry the greatest weight in shaping child nutritional and welfare outcomes, household income and maternal education were

each recoded into contrasting extreme-group indicator variables: low income (household income below ₦30,000 = 1, otherwise 0), high income (above ₦100,000 = 1, otherwise 0), no education (no formal education = 1, otherwise 0), and higher education (HND/Bachelor's degree and above = 1, otherwise 0). All four were entered simultaneously as predictors so that the standardised regression coefficients could be compared directly and ranked. Nutritional status was operationalised as the mean of the three items measuring what the child actually eats, namely meal frequency, dietary diversity, and daily fruit and vegetable intake; welfare status as the mean of the three items measuring broader care practice, namely exclusive breastfeeding, hygienic meal preparation, and adherence to health workers' advice. All tests were conducted at the .05 level of significance.

Test of H₀₁: There is no significant relationship between household socioeconomic status and children's nutritional status in Kogi State.

Table 4: Model Summary and Analysis of Variance for the Regression Predicting Children's Nutritional Status

Source	SS	df	MS	F	p
Regression	1.189	4	0.297	0.758	.553
Residual	150.977	385	0.392		
Total	152.166	389			

Note. Dependent variable: children's nutritional status. $R = .088$, $R^2 = .008$, adjusted $R^2 = -.002$, SE of the estimate = 0.626. Predictors: (constant), low income, high income, no education, higher education. SS = sum of squares; MS = mean square.

Table 5: Regression Coefficients and Ranked Influence of Socioeconomic Disparity Indicators on Children's Nutritional Status

Predictor	B	SE B	β	t	p	Rank
(Constant)	3.277	0.048	—	67.632	< .001	—
Higher education	-0.204	0.136	-0.077	-1.499	.135	1
Low income	-0.057	0.069	-0.043	-0.818	.414	2
No education	-0.046	0.076	-0.031	-0.604	.546	3
High income	-0.001	0.101	-0.001	-0.012	.990	4

Note. Dependent variable: children's nutritional status. β = standardised regression coefficient. Predictors are ordered by the absolute magnitude of β , the rank column indicating relative influence. For each indicator the reference group comprises all respondents not in the stated category.

The overall regression model was not statistically significant, $F(4, 385) = 0.76$, $p = .553$, $R^2 = .008$, and none of the four extreme-group indicators attained significance at the .05 level. Together the predictors accounted for approximately 0.8% of the variance in children's nutritional status. Ranking the indicators by the absolute

magnitude of their standardised coefficients, higher education carried the greatest relative influence ($\beta = -.077$), followed by low income, no formal education, and finally high income, which exerted the weakest influence of the four. Because the model as a whole did not attain significance, these differences in relative weight should be read as descriptive of the present sample rather than as generalisable effects. On this evidence the null hypothesis (H_{01}) is retained.

Test of H_{02} : There is no significant relationship between household socioeconomic status and children's welfare status in Kogi State.

Table 6: Model Summary and Analysis of Variance for the Regression Predicting Children's Welfare Status

Source	SS	df	MS	F	p
Regression	2.268	4	0.567	1.418	.227
Residual	153.970	385	0.400		
Total	156.239	389			

Note. Dependent variable: children's welfare status. $R = .120$, $R^2 = .015$, adjusted $R^2 = .004$, SE of the estimate = 0.632. Predictors: (constant), low income, high income, no education, higher education. SS = sum of squares; MS = mean square.

Table 7: Regression Coefficients and Ranked Influence of Socioeconomic Disparity Indicators on Children's Welfare Status

Predictor	B	SE B	β	t	p	Rank
(Constant)	3.658	0.049	—	74.754	< .001	—

Table 8: Summary of Hypothesis Testing

Hypothesis	Statement	F	p	Strongest indicator	Decision
H_{01}	No significant relationship between household socioeconomic status and children's nutritional status	0.76	.553	Higher education	Retained
H_{02}	No significant relationship between household socioeconomic status and children's welfare status	1.42	.227	Low income	Retained

Note. Decisions are based on the overall model F test at the .05 level of significance. The strongest-indicator column reports the predictor with the largest absolute standardised beta within each model, irrespective of statistical significance.

Discussion of Findings

Research Question One: What is the socioeconomic status of mothers and caregivers of under-five children in Kogi State?

The answer to this research question is provided in the analysis in Table 1, which showed that 66.7% of households subsisted on less

Predictor	B	SE B	β	t	p	Rank
Low income	0.143	0.070	0.108	2.055	.041	1
High income	0.123	0.102	0.064	1.210	.227	2
Higher education	-0.108	0.137	-0.040	-0.784	.433	3
No education	0.033	0.077	0.022	0.432	.666	4

Note. Dependent variable: children's welfare status. β = standardised regression coefficient. Predictors are ordered by the absolute magnitude of β , the rank column indicating relative influence. For each indicator the reference group comprises all respondents not in the stated category.

The overall regression model was not statistically significant, $F(4, 385) = 1.42$, $p = .227$, $R^2 = .015$, the four predictors together accounting for approximately 1.5% of the variance in children's welfare status. At the level of the individual coefficients, however, membership of the low income group emerged as a statistically significant predictor, $B = 0.143$, $\beta = .108$, $p = .041$, while the remaining three indicators did not reach significance. Ranking the indicators by the absolute magnitude of their standardised coefficients, low income carried the greatest relative influence, followed by high income, higher education, and finally no formal education. Since the overall model F test was not significant, this individual coefficient should be treated as suggestive rather than conclusive, and the null hypothesis (H_{02}) is accordingly retained, though the result indicates that extreme income poverty is the disparity most deserving of further and more targeted investigation.

than sixty thousand naira monthly, 84.6% of caregivers had secondary education or below, and three-quarters were engaged in trading or farming, with households drawing on an average of 1.7 income sources each. This suggests that the caregiving population in Kogi State is located almost entirely within the informal economy, where earnings are irregular and no employment-linked social protection exists. This further implies that livelihood diversification functions less as enterprise than as a coping strategy adopted by households whose primary occupation alone cannot meet their needs. This follows the assumptions of the Ecological

Systems Theory, which holds that conditions at the exosystem level, in which the child does not participate, nonetheless govern the resources available within the microsystem where the child is fed and cared for.

This finding is also in tandem with those of Akombi et al. (2019), who found in a decomposition analysis of Nigeria Demographic and Health Survey data that maternal education at the no-education level, household wealth at the poorest category, and rural residence were the key contributors to childhood undernutrition in Nigeria. Similarly, Uthman (2009) established that household economic status alone accounted for 31% of socioeconomic inequality in childhood malnutrition in Nigeria, with maternal education contributing a further 13%. The present study confirms the same configuration of disadvantage at the state level, where national surveys have generally submerged it. The implication is that interventions directed at the individual caregiver, in isolation from the material conditions of the household, are unlikely to succeed, since the constraint is located above the level of the individual.

Research Question Two: What are the child feeding and care practices prevailing among mothers and caregivers in Kogi State?

Table 2 answered this research question, showing a cumulative mean of 3.48 against a criterion of 3.00, with three of six items accepted and three rejected. The division between them was systematic. Exclusive breastfeeding ($M = 4.22$), hygienic meal preparation ($M = 4.16$), and meal frequency ($M = 4.02$) were all accepted, while dietary diversity ($M = 2.94$), daily fruit and vegetable intake ($M = 2.74$), and adherence to health workers' advice ($M = 2.79$) were rejected. This implies that caregivers sustain every practice that depends chiefly on time, effort, and knowledge, and fall short on precisely those that require household expenditure. According to the Ecological Systems Theory, this is the point at which exosystem-level income constraint is transmitted through proximal processes into the concrete matter of what a child eats.

This finding aligns with Scarpa et al. (2022), who reported that although complementary feeding indicators in Uganda had improved, only 22% of children reached the minimum acceptable diet, and household wealth was significantly associated with both dietary diversity and meal frequency. Similarly, the rejection of dietary diversity in the present study sits alongside the finding that two-thirds of these households subsist on less than sixty thousand naira monthly. The high acceptance of exclusive breastfeeding is consistent with Huang et al. (2022), whose cohort study in eastern China confirmed the protective effect of breastfeeding against later overweight and obesity, underscoring the value of a practice these caregivers already sustain without cost. The implication is that the deficit observed here is one of resources rather than of knowledge or commitment, and that nutrition education directed at mothers addresses a constraint that is not the binding one.

Research Question Three: What is the influence of socioeconomic disparities on children's nutritional and welfare status in Kogi State?

The results in Tables 3 to 8 answered this research question. Descriptively, respondents identified household income as the single strongest influence on their children's nutrition ($M = 4.46$, $SD = 0.74$), the highest mean and narrowest dispersion of any item in the instrument, followed by child illness ($M = 4.40$) and food availability ($M = 4.38$), while cultural belief was rejected ($M = 2.69$). Inferentially, however, neither regression model attained significance, $F(4, 385) = 0.76$, $p = .553$ for nutritional status and $F(4, 385) = 1.42$, $p = .227$ for welfare status, and both null hypotheses were retained. Membership of the lowest income band was nonetheless a significant individual predictor of welfare status ($\beta = .108$, $p = .041$) and carried the greatest relative weight of the four indicators examined. This suggests that socioeconomic disadvantage in this population registers at the threshold of extreme poverty rather than across gradations of relative advantage.

This outcome stands in apparent contrast to Zere and McIntyre (2003), who found considerable pro-rich inequalities in stunting and underweight in South Africa which they described as unnecessary, avoidable, and unjust, and to Uthman (2009) and Akombi et al. (2019), both of whom established a clear socioeconomic gradient in Nigerian child undernutrition. The contrast is, however, more apparent than real. Each of those studies drew on nationally representative samples spanning the full income distribution, whereas the present sample is drawn overwhelmingly from a low-income population, only 12.3% of households earning above one hundred thousand naira monthly. Where nearly every household is materially constrained, the differences between them are compressed, and a regression comparing them has little contrast on which to operate. A further consideration is that the outcome measures here are self-reported practice items rather than anthropometric indicators such as height-for-age, and self-report is subject to social desirability effects that may further compress genuine variation. The implication is that the effect of socioeconomic status is not absent but operates as a threshold, and that transfers of a magnitude sufficient to lift households clear of extreme poverty are more likely to alter child outcomes than marginal supplementation.

Conclusion and Recommendations

The overall picture that emerges from this study is that caregivers of under-five children in Kogi State are neither negligent nor ignorant: they succeed at every dimension of child feeding that costs only effort and fall short at those that cost money. This suggests that the binding constraint on child nutrition in this population is material rather than informational, and that behaviour-change communication directed at mothers addresses a deficit that does not exist. That the regression models did not attain significance within a uniformly low-income sample reinforces rather than undermines this reading, indicating that the relevant contrast is not between degrees of poverty but between poverty and sufficiency. By acting upon household economic capacity rather than upon caregiver knowledge, stakeholders can address the constraint that the caregivers themselves identify as decisive.

On this basis, the following recommendations have been provided:

1. Government and its agencies should prioritise income and livelihood support for households with under-five children, with transfers of a magnitude sufficient to lift households clear of extreme poverty rather than offering marginal supplementation, since it was found that extreme low income was the only socioeconomic indicator to register a significant effect on child outcomes.
2. Nutrition programming should shift emphasis from behaviour-change communication toward improving the affordability and availability of diverse foods in local markets, since it was discovered that caregivers already sustain the practices that depend on knowledge and effort while falling short only on those requiring expenditure.
3. Primary healthcare services should strengthen routine contact with households through outreach and growth monitoring, since it was found that adherence to health workers' advice was among the rejected items, pointing to a weak link between households and the formal health system.
4. Future research in this field should incorporate anthropometric measurement alongside self-reported practice, and employ sampling designs spanning a wider income range, since the restricted income distribution of the present sample limited the contrast available to the regression analyses.

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