

## **Socio-Cultural Determinants of Malnutrition Among Under 5 Children in Akwa Ibom State, Nigeria**

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### **Abstract**

*The study examined socio-cultural determinants of malnutrition among under 5 children in Akwa Ibom State, Nigeria. Following a quantitative approach and purposive sampling technique, 400 female participants were recruited. Data from the validated structured questionnaires were analysed using chi-square procedure. The study revealed that There is a significant relationship between household income, cultural practices and malnutrition among under 5 children in Akwa Ibom State. The study concluded by stating that household income, cultural practices affect malnutrition among under 5 children in Akwa Ibom State, Nigeria. The study recommended among other things that low-income household should be provided with palliatives to raise their standard of living. Also, awareness should be created by attitudinal re-orientation commission on the effect of cultural practice and proper feeding of infant as an important stage in child development.*

**Keywords:** malnutrition, household income, cultural practices, maternal mortality, trafficking of children, health care delivery, sexual behaviours, & health care services utilization, Nigeria

### **Introduction**

Despite the social and economic development to tackle the issue of malnutrition among children, the burden of malnutrition across the globe remains significant. Malnutrition has long been linked to poverty, poor environmental health and food insecurity, one of the leading causes of childhood mortality worldwide is the deficiency of macronutrients or micronutrients and each year, more than 5.9 million children under the age of five die around the globe and 45 percent of deaths are attributed to malnutrition (Yaya, & Etobe, 2022). Malnutrition causes permanent, widespread damage to a child's growth, development and well-being. Malnutrition is associated with poorer performance in school because malnutrition affects brain development, malnourished children are more likely to get sick and miss school. It can lead to serious health issues, including stunted growth, eye problems, diabetes and heart disease (Etobe, Tshabalala, & Etobe, 2013).

Early childhood is a time of rapid physical growth and brain development. Lack of proper nutrition exposes the child to infection and illnesses during these early years and can have lifelong consequences on the health, educational attainment, and economic outcome especially for children from the poorest and most marginalized communities (Black et al., 2013). Under-nutrition deprives far too many children of the energy and nutrients they need to grow well (UNICEF, 2019a; Etobe, Etobe, & Plang, 2019). Over the years, studies have shown some socio-cultural and socio-economic influences on the nutritional status of a child. Newborn are barely fed with breast milk, the toddler is being fed with those foods that lack the proper nutrient that ensures their steady healthy growth and development, and the pre-school are being fed with the feeding pattern pertaining to adult. According to Kakute et al (2005), the immediate initiation of

breastfeeding in the rural geographical region of the Northwest province of Cameroon was forbidden, as they did not want their babies to take what they called dirty milk rather, they gave the babies water and/or herbs. This practice is also reported in the Northern part of Nigeria, where infants are usually not given colostrum's; the first yellowish milk secreted from the breast, which has high protein and antibody content (NDHS 1999; Etobe, 2009). This is believed could cause diarrhoea, thereby having a high negative effect on the nutritional status of a child, which includes low birth rate. Studies carried out by Ladipo and Morris (1974) in South-Western Nigeria revealed that some rural mothers deny giving eggs to their children on belief that such delicacy will lead them to steal later in life.

Children born with low-birth-weight face higher risks of chronic diseases as adult and the consequences of insufficient nourishment continues into adulthood and are passed on to the next generation, as malnourished girls and women have children of their own type (The Lancet, 2008). If a child reaches the second year of life, and continues to be undernourished, they could suffer irreversible physical and cognitive damage, which could influence their future health, economic wellbeing and welfare (Bhutta et al., 2008; Etobe & Etobe, 2013).

According to National Bureau of Statistics (NBS 2018) and United Nations Children's Fund, UNICEF (2017), three states (Borno, Adamawa and Akwa Ibom) reported several acute malnutrition rates at or above 2 percent due to cases of oedema found. In total, 24 cases of bilateral oedema were reported: 4 in Benue, 3 each in Yobe, Ebonyi and Akwa Ibom, 2 each in Adamawa and Katsina and 1 each in Bauchi, Cross River, Jigawa, Kaduna, Kwara, Nasarawa, Sokoto, and Zamfara. From their findings, Akwa Ibom state has 29 percent prevalence of child malnutrition making the state the highest in the south-south region. This social problem has in many ways affected early child development which is necessary for proper child growth. Literature has shown the prevalence of child malnutrition in Akwa Ibom state despite the fact that the state is blessed with sea foods and vegetables that are very rich in nutrition components, which draws the question of why or what are responsible for the prevalence of child nutrition in Akwa Ibom State despite the availability of rich foods and vegetation.

Margaret and Rosalyn (2013) carried out a study on nutritional status of children in Akwa-Ibom state and reached the conclusion that mother's education influences proper child nutrition practices among under-five children. After eight years, from the study of Margaret and Rosalyn (2013), it is justifiable to carry out another study in other parts of the state to re- examine the fundamentals of the subject matter, given the reported rise in malnutrition level of the state. Despite the contributions from previous studies on malnutrition on children, this research aims at filling the gap in the literature by investigating the relationship between household income and cultural practices and malnutrition among UNDER 5 CHILDREN in Uyo local government area, Akwa Ibom State.

Two research questions were raised to guide the study:

- i. How does household income relates to malnutrition among under 5 children in Akwa Ibom State?
- ii. What is the relationship between cultural practices and malnutrition among under 5 children in Akwa Ibom State?

The following hypotheses were tested in this study:

- i. There is no significant relationship between household income and malnutrition among under 5 children in Akwa Ibom State.
- ii. There is no significant relationship between cultural practices and malnutrition among under 5 children in Akwa Ibom State.

## **Literature review**

### **Household income and malnutrition**

A household income level is clearly determined by the rate of expenditure on food. Expenditure on food is likely to increase where there is improvement of household income thereby increasing the rate of caloric and protein intake among children and members of the household. On the other hand, poor household income can lead to less expenditure on food and low nutrient/dietary intake. Nnayerugo (1992), opined that the adverse effect of the economic recession on the contemporary developing as well as the developed countries have manifested in household food crisis, dietary inadequacies and infections especially among pre-school children in various socio-economic groups. Poverty, ignorance and disease appear to be the heart of the problem of childhood malnutrition in Nigeria and until there is significant improvement in the socio-economic status of the vast majority of Nigerians in the rural areas, malnutrition will continue to pose a serious threat to the growth and development of Nigerian children and to national development. According to Save the Child Report (2020), a multitude of factors lead to malnutrition. These include not having enough money to buy sufficient nutritious food and not having a reliable supply of food throughout the year; gender inequality; poor infant and young child feeding practices; and limited access to healthcare, safe drinking water and adequate sanitation. According to the results from the studies carried out in two local government areas in Katsina State by Save the Child Report (2020), limited access to cash is one of the determining factors of malnutrition. According to McConnell, Matthews and Liewellyn (2008), undernutrition contributes to 3 million child death's worldwide, 1 in 4 children underage five have started growth due to malnutrition. In Yemen, 85,000 children under the age of 5 may have died from extreme hunger or diseases since the war started. Also, 1 in 5 children in America struggle with hunger, every 39 seconds, and a child dies from pneumonia.

### **Cultural practice and malnutrition**

Different cultural practices such as taboos and beliefs affect lactating women and children children's growth and development. Prohibition or certain food and inadequate knowledge about the benefits of some food deprive the lactating women and children the nutrients they need. Cultural malpractices and beliefs can influence the dietary intake of lactating women and children dietary intake. The influence of cultural on dietary practices contributes to under nutrition. Globally, cultural practices are vital in communities and are known to influence dietary practices, and children under five years are the most vulnerable groups to nutrient deficiencies. According to Kakute et al (2005), woman in rural Cameroun reported additional reasons for early food supplementation. First, they felt pressured by elders to obey this traditional practice. Secondly, they were not allowed sexual contact during breastfeeding. Ekong (2010) states that, a nutritionist trying to introduce pork to a Muslim housewife will not succeed because that particular source of protein is not accepted by that particular religious community. A study on rural women in Ile-Ife by Ladipo and Morris (1974) found out some of them will not accept giving eggs to their children because of the belief that such delicacy will make them steal. Kakute et al (2005) observed that in Cameroun, infants are usually not given the first breast milk – colostrum- which contains high protein and antibody nutrients because of the belief that is “dirty milk” and thus can cause diarrhoea in infants.

According to UNICEF (1995), certain foods are deeply attached with symbolic meanings in every culture. For example, the belief that a child should not be given eggs as this will encourage them to steal. This is likely to determine what shall be eaten, as well as become a cherished tradition to children. In other words, the cultural background of a mother or caregiver embraces certain beliefs concerning some foods and consequently makes them eat or stay away from eating them. Adams et al (2005), reports that new born in rural Tibet are fed butter to affirm the bond with the individual and provide spiritual protection.

## Methodology

This study adopts cross-sectional research design in order to collect data. A cross-sectional design allow[s] for generalization in quantitative components. The study was conducted in Akwa Ibom State, Nigeria. The sample size for the study is four hundred (400) respondents. The respondents were selected from the study area through simple random purposive sampling technique. The questionnaire was the main instrument of data collection. The questionnaire consists of closed ended questions, which were segmented into three parts. Section ‘A’ of the questionnaire contains respondent’s demographic data. Section “B & C” contains information on substantive issues of the study raised in the research questions. Data collected were coded and analysed using Chi-square statistical methods.

## Data Presentation and Analysis

The socio-demographic characteristics of the respondents were presented using the simple percentage. The Chi-square method was used to test the formulated hypotheses of the study. The findings generated from the study were also discussed. Out of the four hundred questionnaires distributed, three hundred and ninety-three (393) questionnaires were retrieved and used for the analysis.

**Table 1 Socio-Demographics of Respondents (N=393)**

Demographic profile	Variable	Frequency	Percent (%)
<b>Gender</b>	Female		
<b>Age of Respondent</b>	15-25yrs	76	19.3
	26-35yrs	85	21.6
	36-45yrs	130	33.1
	46 and above	102	26.0
<b>Educational Status</b>	Primary Education	23	5.9
	Secondary Education	133	33.8
	Tertiary Education	175	44.5
	No Formal Education	62	15.8
<b>Marital Status</b>	Single	83	21.1
	Married	258	65.6
	Widow	52	13.3
<b>Religion</b>	Christian	361	91.9
	Traditionalist	19	4.8
	Muslim	5	1.3
	Others	8	2.0
<b>Occupation</b>	Farming	20	5.1
	Trading	223	56.8
	Public Servant	17	4.3
	Civil Servant	133	33.8

**Source:** Field Work (2022).

The result also shows that under the age characteristics, majority of respondents 130 (33.1%) were between ages 36 - 45 years. In the same way, 102 (26.0%) of respondents were between the ages of 46 and above, 85 (21.6%) of participants were 26–35 years of age, and 76 (19.3%) were between the ages of 15 - 25years. This implies that majority of the study participants were the mature part of the study population’s sample which made the most targeted sample of the study. According to these characteristics, they were expected to give information as related to the main theme of this scientific investigation and to make meaningful contribution in line with the objectives of the study.

It is also observed that under the educational status of the study participants, the researcher categorized the study participants into four groups. Consequently, 175(44.5%) of respondents in this study had tertiary education. 133(33.8.0%) had secondary school education. In the same view, 65 (15.8%) of study participants were those without any formal education, while 23(5.9%)

were those with primary school education. The educational distribution of respondents implies that most participants in this study were of good educational status and are schooled enough to respond to the questions and give valid opinion on the subject matter under investigation as undertaken by the researcher. Under marital characteristics, 258(91.9%) of the respondents were married, 83 (21.1%) were singles, while 52 (13.3%) were widows. Therefore, a large proportion of the study participants were married and had experienced child birth with infant feeding. Under religious affiliation, the result of the study participants shows that 361 (91.9%) were Christians, 19 (4.8%) were traditional worshipers, 5 (1.3%) of the study participants practise Islam, while 8 (2.0%) were into other form of religious practices.

### Hypothesis one

There is no significant relationship between household income and malnutrition among under 5 children in Akwa Ibom State.

**Table 2: Chi-square analysis on household income and malnutrition among under 5 children**

Household income	Malnutrition		Number of Respondents	Percentage (%)
	Underweight	Stunting		
High income	3	50	53	13
Low income	315	25	340	87
<b>Total</b>	<b>318</b>	<b>75</b>	<b>393</b>	<b>100</b>

Source: Field Work (2022)

**Table 3: Contingency table showing the relationship between household income and malnutrition among under 5 children.**

Cell	Fo	Fe	Fo-Fe	(Fo-Fe) <sup>2</sup>	$\frac{(Fo-Fe)^2}{Fe}$
A	3	43	-40	1600	37.2
B	315	275	40	1600	5.8
C	50	10	40	1600	160
D	25	65	-40	1600	24.6
<b>Total</b>					<b>227.6</b>

Source: Field Work (2022)

$$X^2 = 227.6$$

$$d/f = (r-1) \times (c-1)$$

$$(2-1) \times (2-1)$$

$$d/f = 1 \text{ at } 0.05 = 3.841$$

$$\text{Table value} = 3.841$$

### Decision Rule

Accept null hypothesis ( $H_0$ ) if the chi-square  $X^2$  calculated value is equal or less than the table value, otherwise reject  $H_0$  and accept alternative hypothesis ( $H_1$ ).

**Decision:** Since the calculated valued is greater than the table value,  $H_0$  is rejected and  $H_1$  is accepted, showing that there is a relationship between household income and malnutrition among under 5 children.

### Hypothesis two

**H<sub>0</sub>:** There is no significant relationship between cultural practices and malnutrition among under 5 children in Akwa Ibom State.

**Table 4 Chi-square analysis on cultural practices and malnutrition among under 5 children**

Cultural practices	Malnutrition		Number of Respondents	Percentage (%)
	Underweight	Stunting		
Proper feeding habit	190	27	217	55
Improper feeding habit	12	164	176	45
<b>Total</b>	<b>202</b>	<b>191</b>	<b>393</b>	<b>100</b>

Source: Field Work (2022)

**Table 5: Contingency table showing the relationship between cultural practices and malnutrition among under 5 children**

Cell	Fo	Fe	Fo-Fe	(Fo-Fe) <sup>2</sup>	$\frac{(Fo-Fe)^2}{Fe}$
A	190	112	78	6084	54.3
B	12	90	-78	6084	67.6
C	27	105	-78	6084	70.7
<b>Total</b>					<b>250.5</b>

Source: Field Work (2022)

$$X^2 = 250.5$$

$$d/f = (r - 1) \times (c - 1)$$

$$(2 - 1) \times (2 - 1)$$

$$d/f = 1 \text{ at } 0.05 = 3.841$$

$$\text{Table value} = 3.841$$

### Decision Rule

Accept null hypothesis ( $H_0$ ) if the chi-square  $X^2$  calculated value is equal or less than the table value, otherwise reject  $H_0$  and accept alternative hypothesis ( $H_1$ ).

**Decision:** Since the calculated value is greater than the table value,  $H_0$  is rejected and  $H_1$  is accepted, showing that there is a relationship between cultural practices and malnutrition among under 5 children.

### Discussion of Findings

Findings from the first hypothesis confirmed that there is a relationship between household income and malnutrition among under 5 children. The calculated value of 227.6 which is greater than the table value of 3.841 indicated that there is a relationship between household income and malnutrition. Households with high income have access to food while low-income household are opened to tendencies of being improperly fed due to the inability of their parents to afford quality meals for breakfast, lunch and dinner for their children. This finding is supported by Save the Child Report of 2020, that lack of purchasing power reduces a household. It is also observed that the higher the living standards of the households, the lower the proportion of under-nourished children. Also, the biopsychosocial model is in support of this finding which says that household of lack of reliable and sufficed income has a high level of hunger and malnutrition.

Data gathered from the second hypothesis confirmed that there is a relationship between cultural practices and malnutrition among 0-5 years. Evidence from the respondents showed that proper feeding encourages good health and improper feeding brings about underweight and stunting. From the result, the calculated value 250.5 was greater than the table value of 3.841, which led to the rejection of the null hypothesis ( $H_0$ ) and the acceptance of the alternative hypothesis ( $H_1$ ). Therefore, Save the Child Report (2020), is in support of this study, which observed that exclusive breast feeding in the first six months of life can significantly reduce mortality in

children under five years. In addition, it argues that many of these practices contribute to malnutrition and early child under-nutrition. Furthermore, the biopsychosocial model emphasizes that the social aspect of individual is understood through family relationship, circumstance, and beliefs.

### **Summary and recommendations**

This study was carried out to examine the underlying cause of malnutrition among under 5 children in Uyo Local Government Area of Akwa Ibom State. Child malnutrition, encompassing both undernutrition and overweight, are global problem with important consequences for survival, incidence of acute and chronic diseases, healthy development and the economic productivity of individual and society. The outcome of poor nutritional status is reflected in high infant and maternal morbidity and mortality. Review of related literature was done in line with the study's specific objectives.

The study adopted cross sectional survey research. The result and discussion covered all the research questions and the research hypotheses tested respectively with Chi-square ( $\chi^2$ ). The major findings of the study show that factors like household income, cultural practices contribute to child malnutrition among infants 0 – 5 in Uyo Local Government Area, Akwa Ibom State, Nigeria. The study recommended among other things that low-income household should be provided with palliatives to raise their standard of living. Also, awareness should be created by attitudinal re-orientation commission on the effect of cultural practice and proper feeding of infant as an important stage in child development.

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