



**Full Length Research Article**

**EVALUATION OF KNOWLEDGE, ATTITUDE AND PRACTICES OF IMPROVED NUTRITION PROGRAMME AMONG RURAL WOMEN (NURSING MOTHERS) IN OYO STATE, NIGERIA**

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**ABSTRACT**

The study evaluates the knowledge, attitude and practices of improved nutrition programme among rural women (nursing mothers) in Oyo state, Nigeria. Simple random sampling technique was used to select three (3) LGAs; Saki West LGA, Iseyin LGA and Ibadan North LGA. 150 respondents were finally selected from the study area. Data was collected from 150 respondents with the use of pretested and validated structured interview schedule. Descriptive statistics such as frequency counts, percentage, mean and standard deviation were used to describe the data, while correlation coefficient and coefficient of determination were used to test the hypothesis formulated. The result shows that majority (65.3%) had between two and four children while 24% of the respondents had only one child. Majorities (93.33%) of the respondents were married, 70.67% of the respondents obtained information on improved nutrition programme through community health extension workers, while 34% of the respondents obtained the information through friends, 66% of the respondents had favourable attitude towards improved nutrition programme. It was recommended that mass media such as television, radio and other relevant advertisement agents should be encouraged to have more programme on improved nutrition programme for the masses so as to cover wider area of the state and country. Mothers should be encouraged and enlightened to patronize clinic or health centre for proper monitoring of the development of the baby.

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**INTRODUCTION**

Nutrition is the process of providing and receiving food necessary for health and growth (Ogunba, 2000). Food can be simply defined as all the solid and liquid materials taken into the digestive tract that are utilized to maintain and build body tissue, regulate body processes and supply body heat. (Mustapha, 2003). When food is not in the right supply to the body in terms of types, quantity and quality, there is evidence of (food insecurity to individuals, household, and communities. The population of Nigeria is fast growing at geometric progression while food production is at arithmetic progression hence there is clear evidence of food insecurity and malnutrition in Nigeria particularly in the rural areas. Marotz, (2011) states that inadequate and unbalanced nutrition is a problem for growth and development and it could lead to many health problems. According to Ruel and Menon, (2002) Nutrition is considered as an important factor for child growth

and mortality, while Benson and Shekar, (2006) asserted that well-nourished children achieve better physical and mental development, and they also obtain better educational outcomes and economic productivity. Guthries (1986) asserted that nutritional deficits, which occur before birth, cannot be totally reversed by adequate nutrition after birth. Therefore, it is important to promote good nutrition throughout life, particularly, at early stage and later in life so as to live a healthy life. The child on an inadequate diet will not only grow properly, but may also develop anemia and other signs of malnutrition. Therefore, to solve the problem of malnutrition at home and improve the living condition of people, government has embarked on some nutrition programmes in Nigeria such as food fortification and supplement. Fortification is the addition of one or more nutrients to a food for the purpose of improving its nutritional value in order to control certain forms of malnutrition and improve the nutritional status of people without any special action or change of behaviour on their part. The best example of food fortification is addition of iodine to salt as means of preventing endemic goiter. Addition of fluoride to water supplies proved at a definite benefit in the control of dental caries (tooth decay)

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and reduction of teeth lost, milk to which vitamin A and D are added, a sweetened drink to which vitamin B12 are added (Whitney and Hamilton, 1991).

### Statement of the Problem

In most developing countries, lack of essential nutritional needs for children and adults has been associated with uneven distribution of food, lack of knowledge of food utilization, endemic infectious diseases and lack of nutritional education even where food supply is adequate (Latham, 1979). Also the economic situation of most developing countries such as Nigeria has not helped the matter. Despite the fact that Nigeria is blessed with abundant land and human resources for producing enough food for every individual, there is still an evidence of malnutrition among the children, mothers and adults. This is because the expected consumption of nutrient of food for productive existence, job performance, present level of the economy, availability of food material is not met. The effects of malnutrition carry over to adult life have resulted in low productivity in factories and work places, which have greater impact on the economy and standard of living of the people in Nigeria.

In solving the problem of malnutrition of the country, the government (Federal and State as well as non-governmental organization should embark on development programmes that are meant to reduce or eradicate malnutrition in the country. The programmes targeted are improved nutrition programme, which are exclusive breast-feeding, micronutrient supplement, growth monitoring and promoting and provision of affordable food supplement. These nutrition programmes are rated as good and would need to be popularized among women who are the manager of the home. The first strategy was to identify and reach the rural women particularly women of child bearing age with improved nutrition programme/practices. It has been observed that the knowledge, attitude and practices of the target audience about the improved practices both before and after the intervention of the programme are the major predisposing factor to the impact of such programme. This study therefore, aims at evaluating the knowledge, attitude and practices of nutrition programmes among women in Oyo State. The study then, attempts to provide answer to the following questions among many others.

- (i) What are the demographic characteristics of the respondents (women using the improved nutrition programmes/ messages taught to them)?
- (ii) What are the improved nutrition programme packages available in Oyo State?
- (iii) To what extent have the improved nutrition programme packages been accepted for use?
- (iv) What is the level of knowledge, attitude and practices of improved nutrition programme among women in Oyo State?

### Objective of the study

The specific objectives are to:

- i. assess the respondent's demographic characteristics (age, marital status, position in the family, religion, number of

children, income, membership of social organisation) in the study area;

- ii. identify the various improved nutrition programme packages disseminated to rural women in Oyo State;
- iii. determine their knowledge and attitude towards improved nutrition programme; and
- iv. ascertain the improved nutrition packages which have been adopted by the respondents at the community level.

### Testing of hypothesis

There is no significant difference in the knowledge and attitude of rural women before and after improved nutrition programme intervention.

## MATERIALS AND METHODS

The population sample for the study comprises of people of Oyo State. Multi stage random sampling was used to select the sample used. In the stage, three Local Government areas (Saki West, Ibadan North and Iseyin) where health care and nutrition programmes were launched and popular were purposefully selected for the study. In the second stage, five communities were randomly selected based on the population figure from the list collected from Local Government Area Community Development Officers. Ten respondents were finally selected making a total of 150 respondents (nursing mother). A structured pretested, validated questionnaire and interview schedule were administered to obtain information from 150 nursing mothers. Information was obtained on improved nutrition programme disseminated in Oyo State, number of improved nutrition programme disseminated and number accepted by the respondents. Others include attitude of the respondents towards the programme, their knowledge and perception on the improved nutrition programme disseminated in Oyo State. Descriptive statistical technique such as frequency counts, percentage, mean and standard deviation and -weighted mean score were used to summarize the data collected. Correlation analysis ( $r$ ) was used to determine the relationship between the improved nutrition programme and independent variables.

### Knowledge level of the respondents on improved nutrition programme

The respondents were asked to identify the improved nutrition programmes they have heard about and how they know about the programme, identify some of the benefit which could be derived from the programme. The possible maximum score for each respondent is 25 while minimum scores zero. Each of the options were score as Yes = (1), No = (0). The respondents were asked to indicate some of the methods used to disseminate information on improved nutrition programme.

### Perception of the respondents

The respondents were asked to indicate, if the information disseminated is relevant to the need of the users or not, i.e. if it is in-line with their culture, the information was passed at the time needed, availability of ingredients round the year for practicing the message disseminated.

## Attitude of the respondents

The attitude level of the respondents was measured with the use of ten standardized statements in positive and negative forms. The responses were evaluated by the following options: 5 = strongly agreed, 4 = agreed, 3 = undecided, 2 disagreed, 1 = strongly disagreed for positive statement. 1 = strongly agree, 2 agreed, 3 = undecided, 4 disagreed, 5 = strongly disagreed for negative statement. Total attitude score was calculated for each respondent by adding the scores for both positive and negative statements. The respondents were categorized by using their attitude mean score and standard deviation. The attitude scores were grouped as favourable, unfavourable and neutral.

## RESULTS AND DISCUSSION

Data in Table 1 shows that some (36.67%) of the respondents were between 25 and 30 years, 28% were between 31 and 35 years while 20% of the respondents fell between 36 and 40 years. Majority (70%) of the respondents were Christian, 23.33% of the respondents were Muslim while 6.67% were traditional believers. This means that leaders of popular religion could be used to popularize the improved nutrition programme. Table 1 also revealed that majority (93.33%) of the respondents was married, 2.6% of the respondents were divorced and 4% of the respondents were widowed.

**Table 1. Distribution of respondents according to socio demographic characteristics of the respondents**

Characteristics	Frequency	Percentage
<b>Age</b>		
25 – 30years	55	36.67
31 -35years	42	28.00
36 -40years	30	20.00
41 -45years	13	8.67
46 -50years	10	6.67
<b>Religion</b>		
Christianity	105	70.00
Islam	35	23.33
Traditional	10	6.67
<b>Marital status</b>		
Married	140	93.33
Divorced	4	2.67
Widowed	6	4.00
<b>Household size</b>		
1 – 3	36	24.00
4 – 6	98	65.30
7 -9	16	10.67
<b>Position among other wives</b>		
First	133	88.67
Second	16	10.67
Third	1	0.67
<b>Occupation</b>		
Civil servant	68	45.00
Trading	40	26.60
Goldsmith	6	4.00
Hairdressing	14	9.30
Tailoring	12	8.00
Fulltime housewife	8	5.30
Others	2	1.30
<b>Years of formal education</b>		
No formal education	7	4.67
Primary school	24	16.00
Junior secondary school	26	17.33
Senior secondary/modern	30	20.00
N.C.E./OND/University	63	42.00

Source: Field survey, 2013.

Majority (65.3%) had between two and four children while 24% of the respondents had only one child. It can be deduced that household size which indicate the number of children and parent /relatives living under a roof may have serious effect on the acceptance of improved nutrition programme disseminated due to the economic situation of Nigeria. It could also be observed from the Table I that majority 88.67(%) fell into the category of been the first wife among the women married to their husband. The position occupied by the wife/wives may have a greater impact on the rate of acceptance of improved nutrition programme disseminated. 45% of the respondents were engaged as civil servant while 26.6% engaged in trading activities and 5.3% are fulltime housewife/wives. Data in Table 1 show that 4.67% of the respondents did not receive any formal education while 42% of the respondents attended school to National Certificate in Education/Ordinary National Diploma/University level. This may influence the rate of accepting and practicing the improved nutrition programme disseminated.

## Improved nutrition programme identified

Data in Table 2 show that 100% of the respondents were aware of improved nutrition programme disseminated to them. The following improved nutrition programmes were identified. Giving breast milk for the first six months of life (100%) followed by complementary feeding practices such as giving Turn Brown to babies (37.33%), Eko ilera (59.33%), Soymilk (80%), soft rice mashed with fish (91.33%), groundnut meal (10%), cowpea milk (4.67%), growth monitoring and promotion (5.3%) and finally giving of micro-nutrient element such as vit.A (86.7%), zinc (46.7%), calcium (73.3%), iodine (70%), iron folate (42%) and folic acid (47.33%).

**Table 2. Distribution of respondents according to the improved nutrition programme identified**

	Improved Nutrition	Frequency	Percentage
(a)	Giving breast milk for the first 6 months of life	150	100
(b)	Growth monitoring and promotion	80	53.00
(c)	Complementary feeding practices e.g		
	Turn brown	56	37.35
	Eko Ilera	89	59.33
	Soymilk	120	80.00
	Groundnut meal	15	10.00
	Cowpea meal	07	4.67
	Soft rice and fish	137	91.33
	Pap and banana	08	5.33
(d)	Micro nutrient supplement (zinc)	70	46.7
	Calcium	110	73.3
	Vitamin A	130	86.7
	Iodine	105	70.00
	Iron folate	63	42.00
	Folic acid	71	47.33

\*Multiple responses

Source: Field survey, 2013

Data in Table 3 shows that 70.6 7% of the respondents obtained information on improved nutrition programme through community health extension workers, 42% of the respondents also obtained through church, while 34% of the respondents obtained the information through friends, 32%. Other sources of information include radio (32%), printed media (28%), mates (26%) and neighbours (23.3%), television

(22%), and Poster (21.33%). However, 43.33% of the respondents obtained information through other sources.

**Table 3. Frequency and percentage distribution of the respondents according to the source of information**

Source	Respondents	
	Frequency	Percentage
Community health extension worker	106	70.67
Other source	*65	43.33
Religions leader	*63	42.00
Friends	51	34.00
Radio	48	32.00
Mates	39	26.00
Neighbours	35	23.33
Television	33	22.00
Poster	32	21.33
Printed media	19	12.00

\*Multiple responses  
Source: Field survey, 2013

### Perception of the Respondents

The findings in Table 4 show that all (100%) of the respondents indicated that the message disseminated were in line with the culture of the users. Majority (73.33%) of the respondents states that the ingredients needed for practicing the information were available for use round the year. While 63.33% reported that the information was passed at the right time when needed.

**Table 5. Frequency and percentage distribution of the respondents' perception on improved nutrition programme**

	Yes		No	
	F	%	F	%
Relevance of the message to the user	150	100	-	-
Relevance to the culture	150	100	-	-
Availability of ingredient needed	110	73.33	-	-
Relationship of CHE with the respondent	150	100	-	-
Dissemination of information at the right time	95	63.33	55	6.66
Participation of respondents during dissemination of message	98	65.33	52	4.67

Source: Field survey, 2013

The attitude mean score of the respondents was 35.25 with standard deviation of 6.47. The data in Table 6 shows that 66% of the respondents had favourable attitude towards improved nutrition programme, 22% of the respondents had neutral attitude while 12% of the respondents had unfavourable towards improved nutrition programme. It could be deduced that the positive attitude towards improved nutrition programme will make them to accept the information and practice them.

**Table 6. Frequency and percentage distribution of the respondents according to their attitude towards improved nutrition programme**

Attitude	Frequency	Percentage (%)
Favourable (42 and above)	99	66.00
Neutral (35 – 41)	33	22.00
Unfavourable (Less than 28)	18	12.00
Total	150	100

Source: Field survey, 2013

Data in Table 7 shows that improved nutrition programme identified by the respondents have correlation co-efficient (r) of 0.285\*\* and percentage contribution of 8.1. The finding shows that the more, the improved nutrition programme identified by the respondents the greater the usage. The sources of obtaining information by the respondents have r<sup>2</sup> 0.2600\*\* and 6.8% contribution. The updating of information on improve nutrition programme by the respondents have r = 0.241\*\* and 5.8% contribution. This implies that the more they are updating themselves on information relating to improved nutrition programme, the better the acceptance and practicing of such information.

**Table 7. Result of correlation analysis on characteristics of improved nutrition programme**

Characteristics related to nutrition programme	Correlation coefficient (r)	Coefficient of determination (r <sup>2</sup> )	% Contribution
Number of improved nutrition programme identified by the respondents	0.285**	0.081	8.1
Sources of information by the respondents	0.260**	0.068	6.8
Benefit derived from improved nutrition programme	0.106	0.011	1.1
Updating of information by the respondents	0.241**	0.058	5.8

Source: Field survey, 2013

### Conclusion

The following conclusion was made from the findings of the study:

1. Majority of the respondents were religious (Christians, Muslims and traditional).
2. The respondents' age was mostly 34 years and married and mostly first wife of their husband.
3. Majority of the respondents obtained junior secondary/modern school certificate.
4. The source of information for improved nutrition programme were mostly through friends, clinic, neighbour, mass media like (Radio, Television, printed material, poster, leaflet, bulletin and community health extension workers).
5. Finally, the users of the improved nutrition programme disseminated need to be enlightened in order to reduce the amount of money and energy used on curative measures.

### Recommendations

Based on the major findings and conclusion of the study, the following recommendations were made:

1. Mass Media such as television, radio and other relevant advertisement agents should be encouraged to have more programme on improved nutrition programme for the masses so as to cover wider area of the state and country.
2. Both Federal and State government should recruit more Community Health Extension Workers/Staff and set up more centres.

3. Growth monitoring and promotion facilities should be made available in all maternity centre/dispensary health centres in different area of the local government
4. Mothers should be encouraged and enlightened to patronize clinic or Health centre for proper monitoring of the development of the baby.
5. Monitoring committee should be well funded and equipped for effective dispensation of their job.
6. The improved nutrition programme disseminated should be relevant to the needs of the users.
7. An integral campaign method for education of the public/respondents on improved nutrition programme and other related services should be developed.

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