

Assessment of Nutritional Knowledge among Under - Five Children Mothers in Selected Secondary Health Facilities in Abeokuta South Local Government Area, Ogun State, Nigeria

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ABSTRACT

Human nutrition is the science of how food and its components interact with the body to support life, growth, and health. Mothers' knowledge of under-five feeding practices has a lot of implications for the nutritional status of the child as it influences how the child is fed. This study seeks to assess the Nutritional knowledge among under-five children's mothers in some selected secondary health facilities, in Abeokuta South Local Government Area, Ogun State, Nigeria.

The study adopted descriptive cross-sectional design with sample size of 201 respondents (mothers of under-five years' children) using criterion-based purposive sampling technique. A standardized self-structured questionnaire was given to three experts from the field of nursing for evaluation and validation. Data collected from the selected respondents were analyzed using Statistical Package for Social Science (SPSS), version 21.

Findings of the study revealed that majority of the respondents 91(48.1%) are within the age group of 25-35years, 91(48.1%) had secondary education while 115 (60.9%) had 2-3 children. 95(50.3%) had moderate nutritional knowledge. There were no significant differences between socio demographic variables of age (X^2 3.16, $p > 0.05$) educational qualification (X^2 4.19, $p > 0.05$) parity (X^2 2.12, $p > 0.05$) and knowledge of feeding of under five children; age (X^2 2.10, $p > 0.05$), educational qualification (X^2 4.18, $p > 0.05$), parity (X^2 2.14, $p > 0.05$).

The study concluded that most mothers of under-five children in the research area had moderate nutritional knowledge of their children.

Keywords: Nutrition, Knowledge, Mother, Under-Five-Children, Food.

INTRODUCTION

Nutrition, most specifically in human, is the science of how food and its components interact with the body to support life, growth, and health (1). Manikam *et al.*, (2) reported that the first five years of children are the most important as they switch from breast milk to complementary feeding. Hence, the feeding habit and quality of nutrition of a child at this stage of their life is very essential as it contributes to child's growth and wellness (3).

Mothers knowledge of under-five feeding practices has a lot of implications for the nutritional status of the child because it influences how the child is fed (4). However, Boma *et al.*, (5) stated that poor knowledge about appropriate foods and nutrition is often a more significant determinant of malnutrition than the actual lack of food. Studies have also shown that a significant proportion of mothers still have suboptimal knowledge and practice about proper weaning both in this country and some other parts of the world (6, 7).

According to the theory of planned behavior, the intention to carry out specific behavior is said to be the primary motivator behind an individual's particular behavior (8). These intentions are presumptively intended to capture the driving forces behind motivation, including attitude, subjective norm (perceived expectations from others and how they value them), and perceived behavior control (individual's level of knowledge or competences (9). This study, therefore, seeks to assess the nutritional knowledge among under-five children's mothers in selected secondary health facilities, in Abeokuta South Local Government Area, Ogun State, Nigeria.

METHODOLOGY

Study Area

The study was carried out in some selected secondary health facilities (Oba Ademola Maternity Hospital; General Hospital, Ijaye; and Olikoye Ransome Kuti Hospital, Asero) Abeokuta South Local Government Area of Ogun State, Southwest Nigeria.

Study Design

The study adopted the descriptive cross-sectional design.

Population of the study

The population of this study consisted of 479 mothers of under-five children who came for child immunization and infant welfare clinics in Oba Ademola Maternity Hospital (208 mothers), General Hospital, Ijaye (121 mothers) and Olikoye Ransome Kuti Hospital, Asero, Abeokuta (150 mothers) respectively

Sample Size

A total of 201 mothers of under-five children were proportionately divided among the three facilities according to the population of under-five children mothers who came for child immunization and infant welfare clinics in the selected health facilities (Oba Ademola Maternity Hospital (75 mothers), General Hospital, Ijaye (60 mothers) and Olikoye Ransome Kuti Hospital, Asero, Abeokuta (66 mothers)) using Scheaffer, Mendenhall, and Ott Formular (1990).

Sampling Technique

criterion-based purposive sampling technique was used to select the 201 mothers of under-five children.

Study Instrument

A standardized self-structured questionnaire adapted for this study was used to gather quantitative data. The questionnaire was given to three experts from the field of nursing for evaluation and content validity. Amendment and corrections from their observations were made on the instrument.

Confidentiality and Anonymity

Participants' identities and personal information was treated with the utmost confidentiality. Identifying information was replaced with numerical codes to ensure anonymity

Informed Consent

Participants received comprehensive information about the study's purpose, procedures, potential risks, and benefits

Method of Data Collection

The data for this study was collected primarily by the researcher and 2 research assistants. The process of data collection involved taking permission from the head nurse on duty to seek consent from the nursing mothers. They also have clinic days that they used to see the doctor, hence, on these clinic days' questionnaires was administered to the respondents for the study.

Ethical Considerations

Ethical clearance and approval for the study was obtained from the Babcock University Health, Research & Ethical Committee (BUHREC).

Method of Data Analysis

Data collected in respect of the questionnaires was analyzed using Statistical Package for Social Science (SPSS), version 21.

RESULTS

It should be noted that two hundred and one (201) respondents were estimated and participated in this study. All questionnaires were distributed but 189 copies were adequately filled and used in the analysis. Thus, 94.03% questionnaire retrieval success was recorded.

Socio-demographic Characteristics of Respondents.

Table 1 revealed the socio-demographic characteristics of the respondents, only 22(11.6%) were between age 18-24years, 91(48.1%) were between 25-34years, 66(34.9%) were between 35-44years while 10(5.3%) were above 45years. On religion, 90(47.6%) were Christians, 91(48.1%) were Muslims while 8(4.2%) were traditionalist. On ethnicity, 129(68.3%) were Yoruba, 14(7.4%) were Igbo, 10(5.3%) were Hausa, others were 36(19%). On highest level of education, 8(4.2%) had no formal education, 41(21.7%) had primary education, 91(48.1%) had secondary education, 39(20.6%) had post-secondary/first degree, while 10(5.3%) had post graduate education. On parity, 40(21.2%) had less than 2, 115(60.8%) had between 2-3, while 34 (18%) had 4 and above.

Table 1: Distribution of respondents by socio-demographic characteristics N= 189

Socio-demographic characteristics	Frequency (N= 189)	Percentage
Age		
18-24 years	22	11.6
25-34 years	91	48.1
35-44 years	66	34.9
Above 45 years	10	5.3
Religion		
Christianity	90	47.6
Islam	91	48.1
Traditional	8	4.2
Ethnicity		
Yoruba	129	68.3
Igbo	14	7.4
Hausa	10	5.3
Others	36	19.0

Highest level of education		
No Formal Education	8	4.2
Primary	41	21.7
Secondary	91	48.1
Post-Secondary/First Degree	39	20.6
Post Graduate	10	5.3
Parity		
Less than 2	40	21.2
2 – 3	115	60.8
4 and above	34	18.0
Total	189	100.0

Nutritional Knowledge of feeding of under-five in secondary health facilities among Respondents

Results on knowledge of feeding of under-five as seen in table 2 revealed that, majority of the respondents 133 (70.4%) knew that a baby of 0 – 6 months old can be fed with breast milk alone while 142 (75.1%) of mothers knew that baby can be fed with breast milk and water. Likewise, only 104 (55.0%) belief that breast milk with infant’s formula is good for babies. Large number of respondents 125 (66.1%) knew that a baby of 6months – 2 years can be fed with breast milk and pap, while 106 (56.1%) knew that a baby of 6 months - 2 years should not be fed with cereal and infants formula alone. Only 120 (63.5%) of mothers knew that mashed potatoes and fortified pap with milk 142 (75.1%) can be given to a child of 2-5 years.

To summarize the mothers ‘nutritional knowledge on feeding of under-five in secondary health facilities of Abeokuta South Local Government Area, Ogun State, this classification was used to measure level of knowledge.

Table 2: Nutritional Knowledge of feeding of under-five in secondary health facilities among Respondents N= 189

S/N	ITEMS	True (%)	False (%)
	A baby of 0-6months can be fed with:		
1	breast milk alone	133 (70.4)	56 (29.6)
2	Breast milk with water	142 (75.1)	47 (24.9)
3	Breast milk with infant formula	104 (55.0)	85 (45.0)
4	Baby of 4months can be fed with breast milk with vitamin	108 (57.1)	81 (42.9)
5	Baby can be fed with breast milk and some fruits	111 (58.7)	78 (41.3)
	Baby of 6months – 2years can be feed with:		
6	cereals alone	95 (50.3)	94 (49.7)
7	Baby can be fed with cereals and infant formula	83 (43.9)	106 (56.1)
8	Lumpy food to encourage chewing	97 (51.3)	92 (48.7)
9	Breast milk and pap	125 (66.1)	64 (33.9)
	Child of 2 – 5years can be fed with:		
10	mashed sweet Potatoes	120 (63.5)	69 (36.5)
11	Child can be fed with porridge that is light	119 (63.0)	70 (37.0)
12.	Child can be fed with fortified pap with milk	142 (75.1)	47 (24.9)
13.	Child can be given protein such as egg and fish	140 (74.1)	49 (25.9)
14.	Child can be fed with Yam and Egg	121 (64.0)	68 (36.0)
15.	Child can be fed with Rice and Stew	133 (70.4)	56 (29.6)
16.	Child can be fed with Fruits (e.g. Pineapple, water melon)	161 (85.2)	28 (14.8)

Summary of level of mothers’ nutritional knowledge of feeding of under-five

Table 3 summaries the level of mothers’ knowledge of feeding of under-five. From the table, 29 respondents representing 15.3% had low knowledge of feeding of under-five, 95 respondents representing 50.3% had

moderate knowledge while 65 respondents representing 34.4% had high knowledge of feeding of under-five. It could be concluded that mothers had moderate nutritional knowledge of feeding of under-five children.

Table 3: Summary of level of mothers' nutritional knowledge of feeding of under-five

Level	Frequency	Percent (%)
Low (0-7)	29	15.3
Moderate (8-11)	95	50.3
High (12-16)	65	34.4
Total	189	100

Chi-Square Showing the Association between Socio-demographic Variables and the nutritional knowledge of feeding of under-five among nursing mothers

From table 4, none of the socio demographic variables were related to knowledge of feeding of under-five mother because their p-values were greater than 5 percent level of significance. Therefore, the null hypothesis is not rejected and retained. Hence, there was no significant differences between socio-demographic characteristics of age (X^2 3.16 $p>0.05$) educational qualification (X^2 4.19 $p>0.05$) parity (X^2 2.12 $p>0.05$) and knowledge of feeding of under-five among mothers.

Table 4: Chi-Square Showing the Association between Socio-demographic Variables and the nutritional knowledge of feeding of under-five among nursing mothers' N = 189

SN	Variable	Knowledge of feeding of under-five	Low (%)	Average (%)	High (%)	X^2	df	P
1	Age	18-24 years	4 (2.1)	11 (5.8)	7 (3.7)	3.164	6	.532
		25-34 years	16 (8.5)	54 (28.5)	21(11.1)			
		35-44 years	7 (3.7)	37 (19.5)	22(11.6)			
		45 and above	2 (1.1)	6 (3.1)	2 (1.1)			
2	Highest Qualification	No Education	2 (1.1)	5 (2.6)	1 (0.5)	4.191	8	.205
		Primary	7 (3.7)	24 (12.6)	10 (5.2)			
		Secondary	15 (7.9)	53 (28.0)	23(12.2)			
		Post Secondary/First Degree	4 (2.1)	22 (11.6)	14 (6.9)			
		Post Graduate	1 (0.5)	6 (3.1)	3 (1.6)			
3	Parity	Less than 2	5 (2.6)	23(12.1)	12(6.3)	2.120	4	.604
		2 – 3	21(11.1)	68(35.9)	26(13.8)			
		4 and above	3 (1.6)	19(10.0)	12(6.3)			

DISCUSSION

The finding of the study revealed that mothers had moderate nutritional knowledge of feeding of under-five. It was revealed from analysis that 29 respondents representing 15.3 percent had low knowledge of feeding of under-five, 95 respondents representing 50.3 percent had moderate knowledge while 65 respondents representing 34.4 percent had high knowledge of feeding of under-five. This simply means that average mother of under-five children in Abeokuta south local government had moderate knowledge regarding their nutrition. The result is in agreement with the study carried out by Jabeen, *et al.*, (10) which revealed that the levels of awareness among mothers have significantly improved with the briefing of standard and recommended breastfeeding, weaning, and complementary food practices. This study demonstrated that the women have moderate nutritional knowledge of breastfeeding, weaning, and complementary feeding practices. In contrast a study conducted by Esan, *et al.*, (11) showed that the mother's knowledge on breastfeeding and the ideal age for the introduction of complementary feeding was low, which contradicts the findings of the study which revealed that mother's nutritional knowledge was moderate.

CONCLUSION

It is therefore concluded in the study that most mother of under-five children had moderate nutritional knowledge of their children.

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