ASSESSMENT OF MATERNAL NUTRITIONAL KNOWLEDGE, SOCIO-ECONOMIC STATUS AND NUTRITIONAL OUTCOME OF UNDER-FIVE CHILDREN IN ILARO, OGUN STATE

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ABSTRACT

The study was carried out to assess the maternal nutritional knowledge, socio-economic status and nutritional outcome of under five children in Ilaro Area of Ogun State, Nigeria. A sample of two hundred and forty (240) respondents was randomly selected for the population. The instrument used in collecting data was the structured questionnaire showing personal information of the parent and the children, and the anthropometric measurement of under five children. The findings revealed that majority (59.2%) of the parent (respondents) are between 41 to 50 years of age. All the respondents were female. The findings showed the anthropometric measurement of respondents ranged between 80cm and above (57.5%), the weight of respondents ranged between 10-15kg (60.0%). In addition, findings revealed that 55.8 % of the respondents were mildly underweight, 62.5 % had normal stunted growths while 51.7 % had normal wasted growth. The results indicated that there was adequate maternal nutritional knowledge of the parents in relation to the nutrition of their children. The study concludes that food intake of children under the age of five (5) in the study area established a significant relationship with children's age, weight, parents occupation and parent income, yet nutritional related problems exist among the under-five children in the study area. It is therefore recommends that children should be given meals that contain all classes of food nutrients in other to prevent the incidence of malnutrition, underweight, stunted growth and wasted growth and also nutritional counselling should be done for the mothers of the under-five to reduce the prevalence of nutritional related problems.

Keywords: Children, Malnutrition, Nutrition, Parent

1. INTRODUCTION

Nutritional status of the under-five is of great importance since this period of life is considered as pivotal for adequate growth (Badake et al., 2014). Under-nutrition could be described as weighty medical condition characterized by a deficient bodily nutrition (energy, essential proteins, fats, vitamins, and minerals in a diet) as a result of inadequate food intake or faulty assimilation. Over 10 million children of under-five are lost annually due to diseases that can be prevented and even easily treated. Most of these illnesses and majority of these deaths occur in developing countries because of the poor economy of such Countries (Black, Morris & Bryce, 2003). Malnutrition cause more over 30% of all children's deaths who are under-five(United Nations Children's Fund (UNICEF), 2009). According to Badake et al., 2014), assessing the growth of children is a good parameter to look at the development of the children and this also gives insight about food security in the area and assess to good health services. According to Hunger Facts (2015), globally about 795 million individuals are undernourished. The vast majority (98%) of these undernourished reside in the developing countries. Under-nutrition among the under-five remains a problem faced by different parts of the world. Close to 50% of all deaths among under-five are attributable to under nutrition. This implies that there is unnecessary loss of about 3 million young lives every year (Hunger Facts, 2015). Nigeria (especially the rural areas) is one of the developing countries that are affected by this nutrition-related problem. This might be related to causes that are found in other regions of the world like poor access to food, primary care giver factor, socio-economic factor, area of abode and other related factors. The Nigeria Demographic and Health Survey (2003) put the rate of stunted growth among the under-five years to be 38%, underweight to be 29% while wasting was 9.2%. Several factors can be considered to have caused these nutritional deficiencies. According to the Federal Ministry of Health (FMOH) Nigeria (2007), 7% is the rate of compliance of mothers to exclusive breastfeeding of their children who are less than 6 months.

The right to adequate food is recognized in several instruments under international law. Despite this recognition, globally, half of the almost 10 million children under the age of five who die annually do so from a combination of malnutrition and easily preventable disease. The world Health Organization estimates that Approximately 150 million

children younger than 5 years in developing countries are underweight and an additional 200 million children are stunted (WHO, 2007).

In Nigeria, malnutrition under five children contributes major current health problems (morbidity and mortality) in several ways. Under nutrition remains a devastating problem in many developing countries affecting over 815 million people causing more than one –half of children death. The main objective of this study is to assess maternal nutritional knowledge, socio-economic status and nutritional outcome of under five children in Ilaro Area of Ogun State. The specific objectives are to:

- i) Describe the socio economic characteristics of the parents of under five children in the study area
- ii) Examine the feeding practices engaged in by mothers of under-five children in the study area
- iii) Describe the nutritional status of the under-five children using anthropometric index of under-five children in the study area
- iv) Describe the knowledge and practice of mother about nutritional status of the under-five children in the study area.

2. METHODOLOGY

The study was carried out in Ilaro, ogun state is a town in Ogun State,Nigeria. Ilaro town has about 46,999 people (NPC, 2014). Ilaro is a headquarters of the Yewa South Local government, now known as YEWA LAND which replaced the Egbado division of the formal Western State and later became a part of ogun state of Nigeria. Ilaro town is about 50km from Abeokuta, the ogun state capital and about 100km from ikeja, the capital city of Lagos state other neighboring towns to ilaro, headquarter of Yewa land include, Ajilete, Oke-OdanOwode:Ibese, OjaOdan, Pahayi, Idogo-Ipaja,Papalanto and Imasayi. Primary data used for this study was collected with the aid of two hundred and forty well-structured questionnaire using simple random sampling techniques with households being the unit of analysis. Data collected were analysed using descriptive statistics.

Sampling	techniques	and sampling	size of the	e respondent	

Table I			
COMMUNITIES	NO OF HOUSEHOLD	NO OF MOTHERS	NO OF CHILDREN
Okeola	23	27	41
Gbogidi	20	22	45
Dosunmu	25	25	35
Express	26	30	42
Ikosi	29	30	40
Pahayi	27	31	37
	150	165	240

Source: Field survey, 2019.

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3. **RESULTS AND DISCUSSION**

Demographic Characteristics of Children

Table 2: Distribution of respondents by age

Age (years)	Frequency	Percent
1-6 months	12	5.0
7months - 1year	86	35.8
2 - 5 years	142	59.2
Total	240	100.0

Source: Field Survey, 2019.

Table 2 shows the age distribution of sampled children in the study area. The result shows that majority (59.2%) of the children (respondents) aged between 2 and 5 years of age, 35.8 percent were between 7months and 1 year of age while 5.0 percent were between 1 and 6 months old. The result implies that all the categories of children between the 1 month old and five years of age were captured in this survey.

Gender	Frequency	Percent
Male	112	46.7
Female	128	53.3
Total	240	100.0

Table 2: Distribution of respondents by gender

Table 2 presents sex distribution of sampled children in the study area. The result reveals that more than half (53.3%) of the respondents were female while 46.7 percent were male. This implies that both genders of the children in the study area were captured in the survey.

Table 3: Distribution of res	mondents by number	r of children in the	e household
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Number of children	Frequency	Percent
<3	156	65.0
3	40	16.7
4	20	8.3
5 and above	20	8.3
Total	240	100.0

Source: Field Survey, 2019.

As contained in Table 3, majority (65.0%) of the household under study had less than 3 children in the home. Also, 16.7 percent had 3 children in the household, 8.3 percent had 4 and above 5 children respectively. This implies that children in all the sampled households were sizeable in number and can easily be studied.

Table 4: Distribution of respondents by main occupation of parents

Occupation of parent	Frequency	Percent	
Trading	56	23.3	
Artisanship	66	27.5	
Civil servant	64	26.7	
Farmer	26	10.8	
Others	28	11.7	
Total	240	100.0	

Source: Field Survey, 2019.

Table 4 presents distribution of respondents by parents' main occupation. The result shows that 23.3 percent of the parents were traders, 27.5 percent were artisans who one work or the other they have been trained in capable of providing livelihood for the family, 26.7 percent were civil servant, 10.8 percent were farmers while 11.7 percent belong to other form of occupation apart from those listed above. The implication of this is that all (100.0%) the parents captured in the survey were not lazy and indolent as they all had one occupation or the other they engaged in to make ends meet.

4.2	What are the anthropometric indices of children under five (5) years old?
Table 5	5: Distribution of respondents by height (cm)

Height	Frequency	Percent
<20	8	3.3
20-49	8	3.3
50-79	86	35.8
80 and above	138	57.5
Total	240	100.0

Source: Field Survey, 2019.

Table 7 presents distribution of respondents by height and this is measured in centimeters (cm). The result revealed that majority (57.5%) of the respondents had heights between 80cm and above. Also, 35.8 percent had heights between 50 and 79cm, while 3.3 percent had heights between less than 20cm and 20-49cm respectively. The findings imply that majority (57.5%) had higher heights compared to their other counterparts.

Weight	Frequency	Percent
<10	80	33.3
10-15	144	60.0
16 above	16	6.7
Total	240	100.0

Table 6: Distribution of respondents by weight (kg)

Source: Field Survey, 2019.

Table 6 shows that majority (60.0%) weighed between 10-15kg, 33.3 percent weighed less than 10kg while 6.7 percent weighed between 16kg and above. The result implies that respondents had weights that are commensurate with their ages and heights. This could be as a result of the fact that children were averagely being fed with balanced diets that will improved their body performance and help in weight increase.

Table 7: Distribution of respondents by nutritional status

Nutritional status	Frequency	Percent
Underweight		
Severe	24	10.0
Moderate	30	12.5
Mild	134	55.8
Normal	52	21.7
Total	240	100.0
Stunted		
Severe	16	6.7
Moderate	44	18.3
Mild	30	12.5
Normal	150	62.5
Total	240	100.0
Wasted		
Severe	34	14.2
Moderate	66	27.5
Mild	16	6.7
Normal	124	51.7
Total	240	100.0

Source: Field Survey, 2019

Table 7 presents frequency distribution of respondents by their nutritional status. This has been classified according to anthropometric standard into underweight, stunted and wasted parameters. The findings revealed that 55.8 percent of the respondents were mildly underweight, 62.5 percent had normal stunted growths while 51.7 percent had normal wasted growth. This result is in line with the anthropometric standard of measuring nutritional status in children.

Table 8: Nutritional Knowledge le	vel of mothers of children	under five (5) vears
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Level of nutritional knowledge of the mother	Frequency	Percent
High nutritional knowledge	138	57.5
Low nutritional knowledge	102	42.5
Total	240	100.0

Source: Field Survey, 2019

From the result of the analysis above, it indicated that majority of the mothers of under five children (57.5%) in the study area have high nutritional knowledge of their under five children while 43.5% had low nutritional knowledge of their under five children.

Summary of major findings

The findings revealed that majority (59.2%) of the children (respondents) aged between 2 and 5 years of age. More than half (53.3%) of the respondents were female, The result also shows that 23.3 percent of the parents were traders,

27.5 percent were artisans who one work or the other they have been trained in capable of providing livelihood for the family, 26.7 percent were civil servant, 10.8 percent were farmers while 11.7 percent belong to other form of occupation.

The findings showed the anthropometric measurement of children in which height of respondents ranged between 80cm and above (57.5%), the weight of respondents ranged between 10-15kg (60.0%). In addition, findings revealed that 55.8 percent of the respondents were mildly underweight, 62.5 percent had normal stunted growths while 51.7 percent had normal wasted growth. This result is in line with the anthropometric standard of measuring nutritional status in children.

Distribution of respondents by food consumption in the last 24 hours showed that 53.3 percent of the respondents consumed rice for breakfast, 83.3 percent indicated rice as part meal for lunch while 95.5 percent indicated they consumed rice as part meal for dinner. This implies that rice as food is highly consumed among respondents in the study area. The result also shows that 98.3 percent consumed vegetable oil as breakfast, 96.7 percent consumed palm oil for breakfast, 72.5 consumed salt, 98.3 percent consumed water while 53.3 percent consumed soft drink as breakfast. The result implies that respondents consumed different varieties of food as breakfast in the study area. Findings also revealed that 98.3 percent consumed water as full meal for lunch. The results indicated that there was adequate maternal nutritional knowledge of the parents in relation to the nutrition of their children.

4. CONCLUSION AND RECOMMENDATION

Findings from this study provided data which reflects the nutritional status of the under-five and this would help in decision or policy making process. This study would help in early recognition of nutritional related problems of the under-five which would allow the mothers of children with good nutritional status to be praised and mothers with children with poor nutritional status to be adequately counseled.

This study has shown that the food intake of children under the age of five (5) in the study area should be monitored because it has a long way to go about the nutritional status of children which is a determinant factor for their wellbeing. Children should be given meals that contain all classes of food nutrients in other to prevent the incidence of malnutrition, underweight, stunted growth and wasted growth. Proper food intake has impact on the cognitive and academic abilities.

Therefore, the food intake of children has effect on the height and weight of children. Therefore, the following recommendations are suggested:

- i) Children should always be given balanced diet so as to enhance their general well being.
- ii) Children should take food at the appropriate time to improve their body mass index.
- iii) Parents/guardians should supplement the food intake of children to improve their Nutritional status.
- iv) When appropriate, health practitioners who work with children should encourage the parents on proper feeding for their children.

REFERENCES

- Akinsola, H. A. (2006). A-Z of Community Health in Medical, Nursing and Health Education Practice. Ibadan: College Press and Publishers Limited
- Allen LH, Gillespie SR. What works?: A review of the efficacy and effectiveness of nutrition intervention. ACC/SCN Nutrition Policy Paper 2001;19:27
- American Academy of Pediatrics, Work group on Breastfeeding. 1997. Breastfeeding and the use of human milk (Policy statement no. Rep929)
- Badake, Q.D., Maina, I., Mboganie, M. A., Muchemi, G., Kihoro, E.M., Chelimo, E., and Mutea, K. (2014). Nutritional status of children under five years and associated factors in Mbeere South District, Kenya. African Crop Science Journal, 22(s4), 799-806

- Black, R. E., Morris, S.S., and Bryce, J. (2003). Where and why are10 million children dying every year? *Lancet*, 361(1), 2226–2234
- Eveleth PB. Population difference in growth: Environmental and genetic factor. In: Falkner F, Tanner J Meds, editors. Human Growth Neurobiology and Nutrition 3rd ed. London: Bailliere Tindal; 1987.p. 373.
- FAO. 2004. International Year of Rice fact sheets (available at www.fao.org/rice2004/en/ factsheets.htm). http://www.newsmedical.net/health/Symptoms-of-malnutrition.aspx
- Gartner Lm, Newton ER. 1998. Breastfeeding: Role of the obstetrician. ACOG clinical Review 3:1-15
- Gillespie S. Nutrition and poverty. Papers from the ACC/SCN 24th Session Symposium Kathmandu March 1997, Geneva, ACC/ SCN Symposium Report. Nutrition Policy Paper 16, Nov 1997. Geneva: United Nations, 1997.
- Hunger Facts. (2015). Retrieved from:

Laditan, A.A., 1983. Nutrition and physical growth in children Nigeria. J. Nut.Sci., 4: 5-10.

Lawrence RA.1999. Breastfeeding: a guide for medical Profession (5th ed.)

- Macias, Y. F. and Glasauer, P. (2014). Guidelines for assessing nutrition-related Knowledge, Attitudes, and Practices. *Food and Agricultural Organization of the united Nations*.
- National Institute of Population Research and Training (NIPORT). Bangladesh Demographic Health Survey (BDHS). Dhaka: NIPORT, 2004].

Nutrition guidelines L016NUTG01E MEDECINS SANS FRONTIERS (MSF), May 2006 2nd ed. Pages 30-33

- Ojofeitimi, E.O., Adeyeye, A.O., Fadiora, A.O., Kuteyi, A.O., Faborode, T.G., Adegbenro, C.A.Bakare, O.E., Setiloane, K. and Towobola, K.S. (2007). Awarness of obesity and its health hazard among women in a University community. *Pakistan Journal of Nutrition*, 6(5): 502-505.
- Olack, B., Burke, H., Cosmas, L., Bamrah, S., Dooling, K., Feikin, D. R., and Breiman, R. F. (2011). Nutritional Status of Under-five Children Living in an Informal Urban Settlement in Nairobi, Kenya. *Journal of Health*, *Population and Nutrition*, 29(4), 357–363.
- Park S, Park Y. Prevented medicine in obstetric, paediatrics and geriaterics. In: Park K, editor. Park's Text Book of Preventive Medicine, 15th ed. India: M/S Bandaridas Bhan of publisher;1997. p.210.
- Tershakovec AM, Stallings VA. Paediatrics nutrition and nutritional disorder. In: Behrman RE, Kiliegman, editors. Nelson Essential of Paediatrics, 3rd ed. London: W.B. Saunders Company; 1998.p. 312.
- The United Nations Children's Fund (UNICEF) presents this report on malnutrition and its impact on children and families. 1998
- UNICEF The state of the World's children. Oxford University Press, Oxford 1998.
- UNICEF. Strategy for improved nutrition of children and women in developing countries. A UNICEF Policy Review. New York: UNICEF, 1990
- United Nations Children's Fund. (2009). The state of the world's children. Celebrating 20 years of the convention on the rights of the child. New York: United Nations Children's Fund

http://www.compassion.com/poverty/hunger.htm?referer=124445&gclid=Cj0KEQjwnKzABRDy 2pb7nPSazdsBEiQAI4IZQMiJMpIRBbXoAE9EVhpNG2yhPLgaatRRxHaPq3VS3D0aAmR68P 8HAQ

United Nations System Standing Committee on Nutrition and the United Nations Children's Fund, 2007. http://www.who.int/nutrition/topics/statement_commbased_malnutrition/en/

WorldHealthOrganizationandUnitedNationsChildren'sFund,2009.http://www.who.int/nutrition/publications/severemalnutrition/9789241598163/en/ index.htmlWorldHealthOrganization,Nutritional report,2007