# Assessment of Nutritional Knowledge and Feeding Behaviour of Children in Some Selected Day Care Centres in Sabon- Gari L.G.A Kaduna, Nigeria

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#### **ABSTRACT**

Background: Adequate nutrition is useful not only for the survival of the child but also for maximum physical, mental and social development. Thus, Day Care Centres have a responsibility to promote and practice a balanced nutrition education which constitutes knowledge in Child nutrition and feeding behaviour and forms an integral part of childhood development to Adulthood.

Objective: The study objective was to assess the knowledge of child nutrition and feeding behaviour of Caregivers in Day Care Centres in Sabo-Gari Local Government of Kaduna State.

Methods: The study used descriptive survey research. The study population comprised of all teachers and attendants in Day Care Centres in Sabo-gari Local Government Area. Multistage sampling technique was used to select the day care\* Centres (n=80) and the respondents (n=40). Questionnaire was used to collect the information from the respondents. Data collected was analyzed using descriptive statistics of frequency and percentages.

Results: Indicated that majority which represented 65% of the respondents have the requisite knowledge regarding Children nutrition. About 20.5% of the respondents were conversant with the different feeding behaviours attributed to children. A total of 25% of the respondents had adequate knowledge of both child nutrition and feeding behaviour necessary for a balanced nutritional education in early childhood.

Conclusion: There is a need to promote nutrition education among day care\* Centre operators and to have the knowledge of developmentally appropriate feeding behaviour of young children as this will help prevent feeding disorders and behaviour problems.

**Keywords:** Nutrition, feeding, behaviour, Children and Day-Care-Centres.

# **INTRODUCTION**

Adequate nutrition is useful not only for the survival of the child but also for maximum physical, mental, and social development. Childhood is a critical time in the growth and development of a person and it lays stages in the establishment of their physical and mental abilities, hence the need of other caregivers to be knowledgeable in child nutrition (1). Growth and development occurs more during the early childhood (10). Good Nutrition facilitates the development of a child in all dimensions and has considerable long-lasting effects on the child's life.

Furthermore, nutrition is a significant factor in the growth, development and overall functioning of a child. Good nutrition provides the energy and nutrients essential to sustain life and promote physical, social, emotional and cognitive development. Therefore, it is imperative that children get proper nutrition both at home and in school. Thus, Day Care Centres have a responsibility to promote and practice adequate nutrition education which constitute knowledge in child nutrition and feeding behaviour which eventually forms an integral part of childhood development to adulthood (4).

Nutrition knowledge is defined as concepts and processes related to nutrition and health including knowledge of diet and health, diet and disease, foods representing major sources of nutrients and dietary guidelines (7). Nutritional knowledge has an important factor in promoting healthier feeding behaviors, and consequently, maintaining an appropriate body weight, thus, preventing overweight and obesity (2).

According to (6), parents and other caregivers need knowledge about both nutritional content and developmentally appropriate feeding behaviours of children which would will help them to monitor their eating behaviour properly. A good understanding of the development of normal feeding behaviours in infants and young children makes it easier to distinguish between self-limited concerns and those requiring further intervention (8).

Caregivers limited knowledge about choices, feeding and health care seeking practices contributes significantly to negative nutrition outcomes for children in most developing countries (9). Individuals with basic nutrition knowledge have been found to apply what they are aware of when selecting food, thereby, improving nutrition knowledge in children in day care centres. This will help to prevent chronic diseases and improve the standard of life of the child (11).

Feeding is a primary event in the life of young children (12). It should be the focus of attention for parents and other caregivers, and a source of social interaction through verbal and non-verbal communication. The eating experience provides not only sustenance but also an opportunity for learning. The feeding relationship is affected by culture, health status and temperament (5). The nutrition a child receives during the first few years of life can affect his/her health for years to come. Proper child development relies on a solid nutritional foundation, which includes the correct amount of each nutrient (14)

Not only are parents and the home environment is influential in shaping the feeding behaviors of preschool-aged children, but early childhood educators and the child day care environment also have great potential to influence the development of preschooler\* eating behaviors (15). For child day care caregivers to be able to adequately teach children about nutrition, they must be knowledgeable of the basic nutrition standards for children in day care centres (13)

The study assessed the knowledge of child nutrition and feeding behaviour of children in some selected Day Care Centres in Sabo-Gari Local Government Area, Kaduna State, Nigeria. The study was aimed at determining the knowledge of caregivers in child nutrition, feeding behavior of children and their perceptions in providing adequate nutrition.

## **Materials and Method**

Eighty Day Care Centres were selected in Sabo-Gari Local Government Area of Kaduna State, Nigeria. Sabo- Gari L.G.A is one of the 23 LGAs of Kaduna State. It occupies an area of about 600km<sup>2</sup>. It has a land area of about 600km. The population is a mixture of all tribes in Nigeria and some foreigners. The study used descriptive survey research. The population of the study was all teachers and attendants in Day Care Centres in Sabo-gari Local Government Area, Kaduna Nigeria. Multistage sampling technique was employed in selecting the Day Care Centres (n=80) and the respondents (n=40) from the LGA. A structured questionnaire was used to collect the data on the socio-economic characteristics of the respondents, knowledge of child nutrition and feeding behaviour of children. The Day Care was randomly selected from the different wards in the study area. The questionnaire was divided into sections. Section A contained socio-demographic characteristics queries; section B, queries on knowledge of child nutrition; section C, queries on feeding behaviour of children options and section D on the readiness of caregivers in providing adequate diet options. Data collected was analyzed using descriptive statistics of frequency and percentages.

### **Results**

## Socio-economic Characteristics of Respondents

The table below showed the demographic characteristics of the respondent's age, educational level and income earned. The table showed that majority (75%, n=27) of the respondents were between 27- 32 years old, while the least (10%, n=5) were those of age between 14-20 years. The table further showed that (52%, n=21) respondent had formal education while the least educational qualification was primary school representing 1 (2.5%). The table also showed respondents (77.5%, n = 31) were teachers and (22.5%, n = 9)were attendants respectively.

## **Knowledge of Child Nutrition**

Table 2 below shows that majority of the respondents (65%, n = 26) agreed and had the knowledge that during the first six months of life a child is likely to grow better if fed with breast milk

**Table 1: Socio-Demographic Characteristics of Respondent** 

Parameters	Frequency	Percentage%
AGE		
14-20 years	5	15
21-26 years	8	10
27-32 years	27	75
EDUCATION LEVEL		
Formal Education	21	52.5
Informal Education	3	7.5
Primary Education	1	2.5
Secondary Education	7	17.5
Vocational Education	7	17.5
Registered Nurse	1	2.5
Total	40	100
OCCUPATION		
Attendant	9	22.5
Teacher	31	77.5
Total	40	100

**Table 2: Knowledge of Child Nutrition** 

	Question	Agreed		Disagree		Undecided	
		Frequency	%	Frequency	%	Frequency	%
1	Giving a large quantity of meat or fish to a child can cause a child to steal	14	35	20	50	6	15
2	Any type of Cooking method is suitable for meat for Children	19	47.5	20	50	1	2.5
3	Introducing Family foods should be done when the child is 5 months	20	50	12	30	8	20
4	Complete weaning off breast milk should be done not less than 2 years	24	60	12	30	4	10
5	Children meals should include all the basic nutrients	16	40	22	55	2	5
6	During the first 6 months of life the child is likely to grow better if feed with breast milk	26	65	11	27.5	3	7.5
7	Nutrition deals with the way the body uses the food we eat in the body	18	45	14	35	8	20
8	Children meals should be regular	23	57.5	10	25	7	17.5
9	Breast Milk and Water are necessary for infants within the first year of Life	17	42.5	21	52.5	3	7.5
10	Food is essential food for good health	11	27.5	19	47.5	10	25

only. The table further showed that (60%, n = 24) knew that complete weaning from breast milk should be done not less than two years. Also, (57.5%, n = 23), knew that meals should be

regular and the table further showed that the respondents representing (55%, n=22) agreed that children's meals should include all the basic nutrients.

## **Feeding Behaviour of Children**

Table 3 showed that only agreed (22.5%, n = 9, &20%, n=8) had a knowledge that some children always want to eat by themselves and some children do not want to eat a particular food at all respectively, yet the majority of the respondents (72.5%, n=29) disagreed that they had the knowledge of child feeding behaviour.

Perception of Caregivers to provide Adequate Diet.

Table 4 below shows that only (25%, n = 10)

perceived that all growing children need an adequate diet, while, the majority representing (85%, n=34) perceived that daycare centres serve meals to children. Also, (70%, n=28) disagreed that the content of the meal served is not important. This result implied that most of the workers had a wrong perception to provide adequate diet to children under their care.

**Table 3: Feeding Behaviour of Children** 

	Question	Agreed		Disagree		Undecided	
		Frequency	%	Frequency	%	Frequency	%
1	They like to eat with others	5	12.5	29	72.5	6	15
2	Usually excited when they see food	5	12.5	20	50	15	37.5
3	Crying during feeding	4	10	17	42.5	19	47.5
4	Often rejecting food	7	17.5	29	72.5	4	10
5	Always wanting to feed themselves	9	22.5	17	42.5	14	35
6	They play with their food	6	15	17	42.5	17	42.5
7	Not wanting to eat particular food at all	8	20	20	50	12	30
8	Preferring water to food	7	17.5	16	40	17	42.5

Table 4: Perception of Caregivers to Provide adequate diets

	Question	Agreed		Disagree		Undecided	
		Frequency	%	Frequency	%	Frequency	%
1	Content of meal served is not important	7	17.5	28	70	5	12.5
2	Daily snacks as part of children's meal are important	4	10	22	55	14	35
3	Day-care centres serve a meal to children	3	7.5	34	85	3	7.5
4	Nursing mothers are encouraged to extract breast milk for their infants	9	22.5	19	47.5	12	30
5	Varieties in children's meals are encouraged	5	12.5	10	25	25	65
6	Adequate diet includes at least two classes of foods	7	17.5	12	30	23	57.5
7	All growing children need an adequate diet	10	25	14	35	16	40
8	Adequate diets are expensive	6	15	27	67.5	7	17.5

#### **Discussion**

Food habits and behaviour are often formed early in life and nutrition education can <a href="https://www.new.nutrition.com/have">have</a>\* a major role in ensuring appropriate dietary patterns of good health later in life. Food being an agricultural product serves as essential materials for human growth and development. Food plays a very significant role in the physical and social life of any individual from birth to old age (15).

The result in Table 2 showed that the majority (65%; 60%, and 57.5%) of the respondents had good knowledge of child nutrition. This result agreed with the study of (1) that stated that global public health recommendation that infants should be exclusively breastfed for the first six months of life to achieve optimal growth, development and health. Findings from the study are also similar to other studies which indicated that parents and other caregivers need knowledge about both nutritional contents and developmentally appropriate feeding behaviours (7, 8). Good nutrition for a child implies a good immune system, less illness and better health. This enables the children to make a useful contribution to the society in later life, hence, all caregivers or operators of daycare need to know about child nutrition.

Also, the knowledge of child care\* Centre's workers in child nutrition is very important because they play a major role in helping children develop good eating habits and the children receive half or more of their daily nutritional needs while in the daycare (8). Caregivers in daycare centres with good knowledge of nutrition will probably apply it in their household to enhance optimal growth and development of their children. The study further agrees with the opinions of (11), that the first four years of a child's life are critical years of growth and brain development.

The study further revealed that some children (20%) do not want to eat some particular food at all together and some children according to respondents (22.5%) always want to eat by themselves. Yet the majority of the respondents (72.5%) disagreed that most children like to eat together with others. This result is contrary to one of the policy statement on nutrition and eating behaviour of children (12) that staff members need to join children at the table of meals and snacks. Also according to (5), eating together makes the children watch care service provider try new foods and also helps the children and caregivers communication times and satiety, as well as the enjoyment of specific foods (8).

However, in the policy on nutrition and eating habits, children are not supposed to be forced to eat or try foods that they do not want to eat (12). Child day caregivers have great potential to impact the eating patterns and behaviours of children in several ways similar to the impact of parents. Mealtime should be a time that children can relax and talk with one another, while doing that care caregiver converse with children about their foods and minimize any conflicts that may arise (3).

Since nutrition is a significant factor in the growth, development and overall functioning of a child, the child care provider has the responsibility to promote good nutrition for the children while they are in care, and they should provide the families current information about healthy eating. By providing children with the nutrients their bodies need to grow, they can grow and develop to reach the physical and mental potentials (13).

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#### References

- Afolabi, W. A. O., Adesanya, F.A., Adubi, K. O., Onabanjo, O.O. &Sanni, S.A. (2017). Maternal nutritional knowledge and nutritional status of under-five children in selected rural communities in Ogun State, Nigeria. The Nigerian Journal of Nutritional Sciences, 38: 0189-0913.
- Benjamin S, Haines J, Ball S, Ward D.(2008). Nutrition and Physical, Activity in Child Care: What parents Recommend. Journal of American Dietetic Association, 108:1907-1911.
- Dubois, L., Girard, M. & Potvin, K. M. etal. (2009). Breakfast skipping is associated with differences in meal patterns, macronutrients intakes and overweight among pre-school children. Public Health Nutr, 12:19-28.
- El-nmer, F., Salama, A. A. & Ehawany, D. (2014). Nutritional knowledge, attitude and practice of parents and its impact on the growth of their children. Menonfig. Med. J Serial, Online, 2014/ cited 2020, Oct 29/27.

- 5. Linscheid, T. R., Budd, K.S. &Rasnake, L.K. Pediatric feeding disorders. In:Robert, M.C., Ed., Handbook of pediatric psychology. The Guilford Press, New York 481-498.
- 6. Lui, Y. H. & Stein, M. T. (2013). Feeding Behaviour of infants and young children and its impact on child psychosocial and emotional development. Encyclopedia on early child development (online). http://www.childencyclopedia.com/child-/accordingexpert/feeding-behaviourinfantsandyoungchildrenand its-impactthe child.
- 7. Nyaradi, A., Li, J, Hickling, S., Whitehouse, A. J., Foster, J. K.&Oddy, W. H. (2013). 'Diet in the Early Years of Life Influences Cognitive Outcomes at 10 Years: A Prospective Cohort Study', ActaPaediatrica, 102:1165-73, viewed 2 7 October 2016 https://www.ncbi.nlm.nih.gov/pubmed/ 23879236
- 8. Okwori, E. & Onu, R. O. (2016). Child care services and the nutritional wellbeing of children 0-5 years of age in Nigeria. Nigerian Journal of Home Economics 9:2006:3638.
- Olusegun, F. A. & Adebayo, O. (2019). Mothers' nutrition-related knowledge and child nutrition outcome. Empirical evidence from Nigeria. April, 2019 4:14 (4): e 0215110.

- 10. Onu, R. O., Okwori, E. & Onagwa, I. G. (2017). Nutrition and child health: Challenges and implications for the survival of the Nigerian child under climate change.Samaru Journal of Agricultural Education (SJAE), 7:0794-7860.
- 11. Palfreyman, Z., Haycraft, E. &Meryer, C. (2012). Development of the parental modeling of eating behavior scale (PARM): Link with food intake among children and their mothers. Maternal and child nutrition. 106:109-114.
- 12. Picciano, M.F., Smiciklas-wright, H. Birch. L.L., Mitchell, D.C., Murray-kolb, L. &Kristen, L.M.(2000) . Nutritional Guidance is needed during dietary transition in early childhood. Journal of pediatrics 12:106-109 Updated September, 2013. Accessed July, 2020.
- 13. Schwartz C, Scholtens, P. A., Lalanne, A., Weenen, H. & Nicklaus, S. (2011). Development of healthy eating habits early in life. Review of recent evidence and selected guidelines. Appetite57:796-807.
- 14. Taras, H. (2009). Nutrition and student's performance at school. Journal of school health,75:199-213.
- 15. Umaru, M. L. (2010). Assessment of children nutritional knowledge on appropriate of dietary pattern for good health. Nigerian Journal of Home Economics, 4:2006-3628.