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Original Article

ASSESSMENT OF KNOWLEDGE, ATTITUDE AND PERCEPTION OF SCHOOL FEEDING AMONG URBAN AND RURAL CAREGIVERS OF SCHOOL-AGE CHILDREN IN ENUGU STATE, NIGERIA

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ABSTRACT

Background: School feeding / nutrition programme is a consequential part of a school health service. A child who is physically weak, will be mentally weak, and cannot be expected to take full advantage of schooling. The diet of a school child should therefore, receive adequate attention. It should contain all the nutrients in proper proportion, adequate for the maintenance of optimum health. Healthy eating habits among children play a key role in their mental and physical development and also promote growth and reduce many risks associated with both immediate and long-term health problems, hence the need to assess the knowledge, attitude and perception of school feeding among caregivers of school age children.

Methodology: This study was carried out in the selected households within communities in Enugu State, South East Nigeria., a comparative, cross-sectional descriptive study involving households that have primary school children in the selected four (two urban and two rural) communities in Enugu State. The minimum sample size was 422 and participant were selected

using multistage sampling technique, the questionnaire was a pre-tested semi-structured interviewer administered questionnaire in English language adapted from National Health Demographic Health Survey. The questionnaire was divided into sub-sections. Data were collated, assembled and analyzed using International Business Machine (IBM), Statistical Package for Social Science (SPSS), and statistics for windows version 23. Descriptive statistics as percentages and frequency were presented in tables. The mean and standard deviation of parameters in each community were obtained and statistical tests of association between the dependent and independent variables were also carried out and the level of statistical significance was set at $P \le 0.05$. The research protocol was reviewed and approval for the project was sought from the Ethics Review Committee of Nnamdi Azikiwe University Teaching Hospital. Relevant consents were gotten from traditional rulers/ village heads before the commencement of the study. All subjects had the Right to withdraw from the study anytime they wish without explanation. Confidentiality was maintained throughout the study.

Results: Most of the respondents were female 262 (62.4%) and 158 (37.6%) were males with majority of the respondents having formal education 401 (95.48%) and 194(46.19%) completed tertiary education. Majority of the respondents were household representatives 254(60.5%). On Marital status of respondents 371(88.3) were married, followed by 34(8.1%) respondents that were single parents. 159 of the 420(37.9%) respondents were government employee, 113(37%) respondents were self-employed and 70(16.7%) of the respondents were unemployed. Majority of the respondent had a good knowledge and attitude of school feeding. 169(80.86%) of the respondents in urban area have heard about school feeding before health education. On where they heard about school feeding, majority of the respondents heard about school feeding at school before 87(41.63%) and after 98(46.88%) health education. On the purpose of school feeding, majority 173(82.78%) felt that it helps to improve growth, followed by 167(79.9) to improve school attendance before health education, after health education majority 159(76.08%) still believe it helps to improve growth followed by, to improve school attendance 145(69.38%). Conclusion: The main fact of school feeding for children is to deliver improved food nourishment, retentive memory, reduce school absenteeism and illness. This ultimately will improve the level of school attendance if implemented; the result is a drastic reduction in school absenteeism, even as the level of knowledge, attitude and perception of school feeding among caregivers is being assessed.

Keywords: knowledge, perception, attitude, school feeding, school age children.

INTRODUCTION: School feeding / nutrition programme is a consequential part of a school health service. School feeding is an established development aid intervention with multiple objectives including education, nutrition, and health. It also helps to alleviate short-term hunger and cognitive abilities of school children (Park K. Park's textbook of preventive and social

medicine 2018). It is a well-known fact that households spend a lot of money in feeding their children all year round. Yet at the end, some children are still malnourished, they get sick and are absent from school (Akombi BJ, 2017). But school feeding will definitely reduce both time and money spent on illness and school absenteeism. The main aim of school feeding for children is to deliver improved food nourishment, retentive memory, reduce school absenteeism and illness. This ultimately will improve the level of school attendance if implemented; the result is a drastic reduction in school absenteeism (Akombi BJ at al, 2017). According to Ministry of Education guideline, a child should receive adequate balanced diet for improved growth. Healthy eating habits among children play a key role in their mental and physical development and also promote growth and reduce many risks associated with both immediate and long-term health problems (Bain LE, Awah PK, 2013). A child who is physically weak, will be mentally weak, and cannot be expected to take full advantage of schooling. Most children in sub Saharan Africa live under the burden of malnutrition. Malnutrition is the most widespread condition affecting the health of school children (World Health Organization, 2017). Socio-economic determinants like lack of purchasing power of the family, scarcity of foods, traditional beliefs and taboos about what the child should eat often lead to an insufficient balanced diet, resulting in malnutrition. It makes the child more susceptible to infection, in some cases the recovery is slower and mortality is higher. Undernourished children do not grow to their full potential of physical and mental abilities. Malnutrition can also lead to wasting, underweight and stunting in children. It can also manifest by clinical signs of micronutrient and vitamin deficiencies (Rosales FJ, Reznick SJ, 2009). Malnutrition can lead to delayed entry to school, lesser overall schooling, smaller stature, and 14% lower earnings as adults (World Health Organization, 2017). Malnutrition has been identified to affect the cognitive development of children. Apart from the adverse effects of malnutrition on the cognitive achievement of school children, malnutrition is also likely to result in poor attendance at school, low health status which will invariably lead to high withdrawal rate. Nutritional and health status have powerful influence on a child's learning and on how well a child performs in school. Children who lack basic nutrients in their diet (particularly macro and micronutrients), or who suffer from protein-energy malnutrition, hunger, parasitic infections or other diseases, do not have the same potential for learning as healthy and well-nourished children. Weak health and poor nutrition among school-age children diminish their cognitive

development either through physiological changes or by reducing their ability to participate in learning experiences or both. Childhood under-nutrition imposes significant economic costs on individuals and nations, hence improving children's diets and nutrition can have positive effects on their academic performance and behaviours at school as well as their long-term productivity as adults (The World Bank and World Food Programme, 2012). Nutritional deficiencies not only lead to severe illnesses, entailing long and costly treatment, but also influence physical development of the child, psychic behaviour and susceptibility to infection. The special functions of the brain are reflected in a higher need for certain nutrients such as iodine, folic acid, iron, zinc and special fats. According to World Bank, school feeding programme is a targeted social safety nets that provides both educational and health benefits to the most vulnerable children, thereby increasing enrolment rates, reducing absenteeism, and improving food security at the household level. It enhances the diet and increases the energy and kilocalories available to a child (Akombi BJ, Agho KE, 2017). It targets micronutrient deficiencies, which are widespread among school-age children in developing countries and which increase susceptibility to infection, leading to absenteeism and impairing learning capacity and cognition A balanced diet is very important because it builds, protects and repairs the body tissues (Chen C, Crawford P, Dary O, Drewnowski A, 2013). Since school feeding was launched in 2005 and re-launched in 2016 in Enugu State, no previous works have been carried out to determine the willingness to pay for school feeding programme among urban and rural dwellers in Enugu state. Also there are fewer studies on how keen, are people to pay for school feeding across socioeconomic groups, therefore there is need for this study to actually assess knowledge, attitude and perception of school feeding. From the available literatures on the launch of school feeding in Nigeria, there have been studies that are based on the type of food served to pupils as school meal, the serving size and proximate composition, but studies are yet to be carried out on the level of knowledge, attitude and practice of school feeding. Thus, the importance of carrying out this study cannot be overemphasized.

The study therefore seeks to fill the gap by assessing the level of knowledge, attitude and perception of school feeding among caregivers in the Enugu State, with the hope that they are willing to pay for school feeding programme currently implemented in Public Primary schools in Nigeria.

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METHODOLOGY

Study Area

This study was carried out in the selected households within communities in Enugu State, South East Nigeria. Enugu State has a population 3,257,298 people with children under 14 years making up to 41 percent of the entire population according to national census of 2006. It is bounded by Abia State on the south, Ebonyi State by the east, Anambra State at the west, then Kogi and Benue States on the north with a total land area of 7,161 sq. km. It is made up of 17 Local Government Areas (LGAs) divided into three (3) ssenatorial districts. Of the 17 LGAs, three (Enugu North, Enugu South and Nsukka) are urban LGAs while the remaining 14 are rural. Most of the urban dwellers are civil servants, traders, transporters or artisans while rural dwellers are largely subsistence farmers and petty traders. The people are mostly Igbo and are predominantly Christians. The language commonly spoken is Igbo, followed by English. People from other tribes especially the Hausas and Yorubas are also found in the State.

Enugu state has one thousand two hundred and twenty three (1223) public primary schools scattered throughout Enugu State with enrolment of 177,185 pupils in public primary schools. Each LGA has a given number of Government owned and private schools also widely distributed in the various towns under it. Enugu State launched school feeding in 2005 and re-launched in 2016.

Study Design: The study is a comparative, cross-sectional descriptive study

Study Population: The study population consists of households that have primary school children in the selected four (two urban and two rural) communities in Enugu State.

Inclusion criteria: Respondent must be a caregiver of school age child, residing in the selected community and a child (6-11 years) in primary school

Exclusion criterion: Parents or guardians who declined consent

Sample Size Determination

The minimum sample size was computed using the formula for calculating minimum sample size for infinite population (population > greater than 10,000). The prevalence of practice of the subject was assumed to be 50% (0.5)

 $\mathbf{n} = \mathbf{z}^2 \mathbf{p} \mathbf{q} / \mathbf{d}^2.$

Where:

```
n
        = Sample size,
        = Standard normal deviate set at 95% \approx (1.96)
\mathbf{Z}
        = Prevalence of practice of the subject assumed to 50% (0.5),
p
        = Complementary probability of p (1-P)
q
d
        = Error margin at 5\% (0.05).
              (1.96)^2 \times 0.5 \times (1-0.5)
n
                     (0.05)^2
             3.8416 x 0.5 x 0.5
                 0.0025
              0.9604
n
              0.0025
              384.16 \approx 384
n
```

An attrition rate of 10% (38.4) was added. The minimum sample size was 422

Sampling Technique:

Multistage sampling technique was used.

Stage 1: Selection of Local Government Areas: Enugu States has 17 Local Government Areas (LGAs), which comprises of 3 Urban LGAs and 14 Rural LGAs. Two LGAs comprising of one urban Enugu South and one rural Nkanu West were randomly selected from the 17 LGAs in the state.

Stage 2: Selection of communities: Two communities were selected from each of the LGAs using simple random sampling (balloting). The two selected communities from Enugu South LGA were Amechi and Ugwuaji while Akpugo and Ozalla communities were selected from Nkanu West LGA.

Stage 3: Selection of households: The households were selected by modified cluster random sampling. In each of the selected communities, a central location (eg the major market or meeting area) was the starting point for sampling. The direction that was taken in selecting the first household to be visited was determined by spinning a bottle on an even ground and where the bottle pointed when it stopped was the direction taken. In the direction of point of the bottle,

consecutive houses were selected until the required 106 households per community were completed, (urban and rural) of the selected community using the NPC house listing.

Pretesting

The study instrument was pretested in 40 households, 10 households each from both urban and rural communities outside the selected Local Government Areas. Reaction of respondents to the research questions were observed to determine their understanding and acceptability to the questions asked and their willingness to participate in the study. Also, the validity of the data collection tools and the amount of time needed to administer the questionnaire was determined

Data Collection

The questionnaire was a pre-tested semi-structured interviewer administered questionnaire in English language adapted from National Health Demographic Health Survey. The questionnaire was divided into sub-sections. Section A: Personal data of respondent, Section B: Knowledge, attitude and practice of school feeding, Section C: Factors influencing school feeding practice, Section. The collection of data was preceded by courtesy visits to the traditional rulers of the selected communities where the purpose and details of the study were fully explained. Two research assistants who are degree holders were recruited for the study. They were trained in a private school in Enugu for two days on the administration and filling of the questionnaire by the principal investigator. They took part in the pretesting in order to assess the success of the training.

Data Analysis

Data were collated, assembled and analysed using International Business Machine (IBM), Statistical Package for Social Science (SPSS), and statistics for windows version 23. Descriptive statistics as percentages and frequency were presented in tables. The mean and standard deviation of parameters in each community were obtained and statistical tests of association between the dependent and independent variables were also carried out and the level of statistical significance was set at $P \le 0.05$.

An asset-based socio-economic status (SES) index developed using principal components analysis-P.C.A. were used to examine whether there were systematic SES differences in the variables. The SES groups were quantified according to the average number of respondents for this study. This was because of the need to grade levels of financial capacity among the

caregivers. The variables included in the index were household availability of electricity, fridge, TV, motor car, bicycle and motorcycle

Ethical Considerations

The research protocol was reviewed and approval for the project was sought from the Ethics Review Committee of Nnamdi Azikiwe University Teaching Hospital. Relevant consents were gotten from traditional rulers/ village heads before the commencement of the study. All subjects had the Right to withdraw from the study anytime they wish without explanation. Confidentiality was maintained throughout the study.

Limitations

Considering the unstable nature of economy market which leads to unstable price of goods and services, there was price variation among respondents depending on the time the interview was being conducted in the study.

RESULTS

TABLE 1: SOCIODEMOGRAPHICS

Variables	Frequency(N=420)	Percentage
SEX Male	158	37.6
Female	262	62.4
Temale	202	02.4
MARITAL STATUS		
Married	371	88.3
Single	34	8.1
Divorced	7	1.7
Widowed	8	1.9
EDUCATIONAL STATUS Formal Education No Formal Education	401 19	95.48 4.52
POSITION IN HOUSEHOLD		
Household Head	166	39.5
Household Representation	254	60.5
HIGHEST LEVEL OF EDUCATION		

Primary	43	10.72
Secondary	164	40.90
Tertiary	194	48.37
MAJOR SOURCE OF		
INCOME AGE		
Government Employed	160	37.9
Privately Employed	38	9.1
Self Employed	113	27.0
Retired	23	5.7
Student	14	3.3
Unemployed	70	16.7
Others	1	0.2
No Response	1	0.2

Table 1, most of the respondents were female 262 (62.4%) and 158 (37.6%) were males with majority of the respondents having formal education 401 (95.48%) and 194(46.19%) completed tertiary education. Majority of the respondents were household representatives 254(60.5%) as against household heads 166(39.5%). On Marital status of respondents 371(88.3) were married, followed by 34(8.1%) respondents that were single parents. 159 of the 420(37.9%) respondents were government employee, 113(37%) respondents were self-employed and 70(16.7%) of the respondents were unemployed.

TABLE 2: SOCIODEMOGRAPHICS BETWEEN URBAN AND RURAL

	URBAN		RURAL	
Variables	Frequency (N=209)	Percentag e	Frequency (N=211)	Percentag e
MARITAL STATUS				
Married	178	88.3	193	91.5
Single	22	8.1	12	5.7
Divorced	6	1.7	1	0.5
Widowed	3	1.9	5	2.4
EDUCATIONAL				
STATUS				
Formal Education	200	95.7	201	95.3
No Formal Education	9	4.3	10	4.7
POSITION IN HOUSEHOLD				

Household Head Household Representation	113 96	54.1 45.9	53 158	25.1 74.9
HIGHEST LEVEL OF EDUCATION Primary Secondary Tertiary	17 119 64	8.1 56.9 30.6	26 45 130	12.3 21.3 61.6
MAJOR SOURCE OF INCOME				
Government Employed	43	20.6	117	55.5
Privately Employed	19	9.1	19	9.0
Self Employed	67	32.1	46	21.8
Retired	2	1.0	21	10.0
Student	13	6.2	1	0.5
Unemployed	64	30.6	6	2.8
Others	0	0	1	0.5
No Response	1	0.5	0	0
Total	209	100.0	211	100

Table 2, 184 (88.3%) of caregivers in urban areas and 193(91.5%) in rural areas were married. 200(95.7%) respondents in urban and 201(95.3%) respondents in rural areas had formal education. The household heads were 113(54.1%) and 53(25.1%) in urban and rural areas respectively while the household representatives were 96(45.9%) and 158(74.9%) in urban and rural areas respectively. In Urban area, the level of education with the highest frequency is Secondary 119(56.9%), followed by Tertiary 64(30.6%), then Primary 17(8.1%) while in rural, we have Tertiary as the highest 130(61.6%), followed by Secondary 45(21.3) and Primary 26(12.3%). The major source of income in the Urban areas was through self-employment 67(32.1%) followed by unemployed 64(30.67%) while in the Rural we have Government employee 117(55.8%) as the highest followed by self-employed 46(21.8%).

TABLE 3A: KNOWLEDE AND PERCEPTION BEFORE AND AFTER HEALTH EDUCATION

URBAN (N=209)

Variable	Frequency	Before Percent	Frequency	After Percent			
Ever heard of School Feeding							
Yes	169	80.86	197	94.26			
No	39	19.14	12	5.74			
Where first hear	rd about school fe	eding					
School	87	41.626	98	46.889			
Teacher	21	10.047	15	7.177			
Radio	21	10.047	21	10.047			
Television	17	8.133	13	6.220			
Relative or	27	12.875	19	9.090			
Friends							
Purpose of Scho	ol Feeding						
Improve School	167	79.90	145	69.38			
Attendance	107	17.70	143	07.50			
Improve School	160	76.56	141	67.46			
Enrolment	100	70.50	111	07.10			
To Improve	173	82.78	159	76.08			
Growth							
To Reduce	152	72.73	131	62.68			
Sickness							
All of the above	121	57.90	125	59.68			
None of the above	11	5.26	7	3.35			
above							

Table 3A, 169(80.86%) of the respondents in urban area have heard about school feeding before health education. After health education, the number increased to 197(94.86%). On where they heard about school feeding, majority of the respondents heard about school feeding at school before 87(41.63%) and after 98(46.88%) health education. On the purpose of school feeding, majority 173(82.78%) felt that it helps to improve growth, followed by 167(79.9) to improve school attendance before health education, after health education majority 159(76.08%) still believe it helps to improve growth followed by, to improve school attendance 145(69.38%).

TABLE 3B: KNOWLEDGE AND PERCEPTION BEFORE AND AFTER HEALTH EDUCATION

RURAL (N = 211)

		Before		After
Variable	Frequency	Percent	Frequency	Percent
Ever heard of So	chool Feeding			
Yes	176	83.41	208	98.58
No	35	16.59	3	1.42
Where first hear	rd about school	feeding n=176 (Before) and 208(Af	ter)
School	28	13.90	28	13.27
Teacher	19	10.80	51	24.52
Radio	26	14.77	26	12.50
Television	66	37.50	66	31.73
Relative or	37	21.02	37	17.79
Friends				
Purpose of Scho	ol Feeding			
Improve School Attendance	155	73.46	32	15.17
Improve School Enrolment	96	45.50	12	5.69
To Improve Growth	35	16.59	51	24.17
To Reduce Sickness	29	13.74	30	14.22

Table 3B, 176(83.41%) of the respondents in rural area have heard about school feeding before health education. After health education, the number increased to 208(98.58%). On were they heard about school feeding, majority of the respondents heard about school feeding on television 66(31.28%) before and after health education. On the purpose of school feeding, majority 155(73.46%) felt that it helps to improve school attendance, followed by 96(45.50) to improve school enrolment before health education, after health education 51(24.17%) believe it helps to improve growth followed by to improve school attendance 32(15.17%).

TABLE 4A: ATTITUDE BEFORE AND AFTER HEALTH EDUCATION

URBAN (N = 209)

		Before		After
Variable	Frequency	Percent	Frequency	Percent
Have you enrol	led any of your o	child?		
Yes	52	24.88	51	24.40
No	156	76.64	158	75.00
What are your	reasons for not o	enrolling your ch	nild?	
Small meals	29	13.88	27	12.92
Improperly	115	55.02	99	47.37
prepared meals				
Not interested	28	13.40	39	18.66

Table 4A, most of the respondents in urban areas have not enrolled any of their child into school feeding 156(76.64%) and the major reasons for not enrolling their child is due to improperly prepared meals with 115(55.02%) respondents before and 99(47.37%) respondents after health education.

TABLE 4B: ATTITUDE BEFORE AND AFTER HEALTH EDUCATION

RURAL (N = 211)

		Before		After
Variable	Frequency	Percent	Frequency	Percent
Have you enrol	led any of your	child?		
Yes	44	20.85	45	21.33
No	162	76.78	165	78.20
What are your	reasons for not	enrolling your cl	nild?	
Small meals	16	7.58	7	3.32
Improperly	52	24.64	8	3.79
prepared meals				
Not interested	62	29.38	1	4.74

Table 4B, most of the respondents in rural areas have not enrolled any of their child into school feeding 162(76.78%) and the major reasons for not enrolling their child is because they are not interested in the program 62(29.38%) respondents before health education but after health education, there was improved interest with only 1(0.47%) of the respondent still not interested.

TABLE 5: RELTIONSHIP BETWEEN EVER HEARD ABOUT SCHOOL FEEDING AND SOCIODEMOGRPHICS

AND SOCIODEMOC	FRPHICS					
	Urban		Rural		Combined	
Variables	Before	After	Before	After	Before	After
Position in household						
Household head	93	70	40	1	133	71
Rep of household	20	6	136	0	212	49
Chi ² (p-value)	0.18 (0.40)	0.38	3.23	4.00(0.25)	0.93 (.20)	1.20(0.12)
4 /	,		(0.06)	,	,	,
Gender						
Male	90	57	34	0	124	62
Female	79	62	142	1	221	58
Chi ² (p-value)	0.26 (0.37)	3.20	7.11	0.44	1.95	3.34(0.056
4 /	,	(0.07)	(0.01)	(0.75)	(0.10))
Age		, ,	,	,	,	,
20-30	86	66	22	0	108	24
31-40	49	28	74	1	123	63
41-50	22	13	54	0	76	17
51-60	3	3	20	0	23	5
61+	0	0	5	0	5	2
Chi ² (p-value)	0.36(0.95)	3.03(0.3	6.99(0.14)	4.00(0.25)	6.09(0.19)	2.86(0.58)
Cin (p varae)	0.30(0.33)	9)	0.55(0.11)	1.00(0.23)	0.05(0.15)	2.00(0.50)
Educational Status		- /				
Yes	162	119	170	NA	332	120
No	38	0	6		13	0
Chi ² (p-value)	0.21 (0.54)	9.99	(0.02)		6.35	8.06(0.11)
(r ·)	3.22 (3.2.1)	(0.09)	(313_)		(0.02)	0100(011-)
Level of education		()			(
Primary	14	12	14	1	28	12
Secondary	92	78	31	0	123	79
Tertiary	55	28	127	0	182	28
Chi ² (p-value)	2.12 (0.55)	2.05	56.07(0.00	4.00	36.45(0.00	1.93(0.59)
4 /	` ,	(0.56))	(0.25))	` ,
Major source income				. ,		
Govt employee	36	18	111	1	147	18
Privately employed	13	4	13	2	26	4
Self employed	52	35	26	0	78	36
Retired	2	2	19	0	22	2
Student	8	5	1	0	9	5
Unemployed	57	55	5	0	62	55
Chi ² (p-value)	10.07(0.07	3.71	39.39(.00)	4.00	36.07(0.00	8.76(0.12)
- (r · ········))	(0.59)	()	(0.14))	3 2 (0.1 <u>-</u>)
Married	,	(/		\-· /	,	
Yes	150	112	161	NA	113	113

Table 5, the association between ever heard of school feeding and gender was statistically significant $X^2 = 7.11$, p=0.01 in the rural are before health education but not after health education $X^2 = 0.44$, p=0.75. The association between ever heard of school feeding and education status was statistically significant in both rural $X^2 = 7.11$, p=0.01 and total $X^2 = 7.11$, p=0.01 respondents before health education.

DISCUSSION

The level of knowledge, perception and attitude on school feeding among urban and rural caregivers of school age children in Enugu State were x-rayed in this study. This study shows that most of the care givers had formal education 401 (95.48%). This is consistent with the study in Owerri, Nigeria where mothers had formal tertiary education (64.7%) The observation is in contrast with findings from similar previous study on school feeding conducted in Southern Ethiopia and Kenya which reported that the majority of the respondents' mothers did not attend formal education and have lower levels of household income. A higher female respondents 262(62.4%) was observed with greater majority of respondents married in the study 371(88.3%). This observation is in keeping with findings from previous studies in Southern Ethiopia and Owerri, Nigeria. The study observed that most of the respondents both in urban and rural areas are employed by the government 160 (37.9%). This however was in contract to a similar previous study conducted in Southern Ethiopia where most of the respondents' parents were farmers. The household weekly food expenditure was different between the urban #19,641.73 ± #38,956.83 and rural dwellers #12,311.79 \pm #15,514.65. Those in urban areas spend more than their counterparts in rural areas. This findings are in agreement with previous studies conducted in Ethiopia where a greater proportion of poverty was detected in rural areas. More than half of the respondents 323(76.9%) from both urban and rural areas agreed that school feeding programme will improve class attendance and thereby reduce absenteeism. This finding also collaborate with study in Ethiopia where absenteeism among beneficiary children (49.7%) is lesser when compared to the non-beneficiary children (91.6%) and also the study in Lagos, Nigeria. The care givers in both urban and rural areas also agreed that the school feeding

programme will likely to improve children nutritional status. This also is in keeping with the findings in the study in Kenya Falade OS et al in their survey realized that, the daily food intake by the school children revealed that many children eat twenty naira (N20:00) worth of rice as breakfast, soak Garri (a cassava product) and groundnut cake (kulikuli) as lunch and now take Eba (another product of cassava meal) or Amala (Yam flour meal) with okra soup as dinner. Therefore, making the school meal seems to be the best and the most nutritious food for the child throughout the day. Can this be the reason why respondents in the urban 168(80.38%) and rural 96(45.50%) areas before health education, indicated that the children having balanced diets at school as a likely factor that will make it easier for them to enrol their children into school feeding. Suggestions were made in the study based on other studies, on increasing the quantity of food given to the pupils in order to meet at least 50% of the protein and vitamin requirement per day. As regards the caregivers perspective on the purpose of school feeding, majority of the respondents in urban areas felt it will help for improved growth 173(82.78%), followed by improved school attendance 167 (79.9%) before health education, 159(76.08%) and 145(69.38%) respondents respectively after health education. In the rural majority went for improved school attendance 155(73.46%) which is one of the major challenges faced by school children in rural areas, followed by improved school enrolment, also another major challenge, before health education. Then after health education, 51 (24.17%) now felt it will help for improved growth followed by improved attendance by 32(15.17%). These findings corroborates with the study on school feeding in Osun State which stated that school feeding in the State resulted in an increase in pupils' enrolment (78.4%), retention (44.8%) as well as regularity (58.6%) and punctuality (69%) in school attendance. School feeding also enhanced the pupils' performance in curricular and extra-curricular activities (55.2%). In many countries such as Brazil, Philippines, Cambodia, Mali, El Salvador, Indonesia, Ghana, Bangladesh, Ecuador etc where school feeding programmes are implemented, data reveals that the programme has increased enrolment and attendance rate over the years

Many studies on nutrition have shown that under nutrition in children stunts their growth and mental development, hence the relationship between nutrition and academic performance. It was found that in Bangladesh, the research carried out by the International Food Policy Research Institute on the effects of school feeding programme found that the programme raised school

enrolment rates by 14.2%, reduced the probability of dropping out of school by 7.5% and increased school attendance by 1.3 days a month. Also in another study in Bangladesh, a programme of school based food distribution increased enrolment by 20% and a 2% decline in non-participating schools. The irregular school attendance of malnourished and unhealthy children is one of the key factors for poor performance. Another study noted that students in school feeding programme have the potential for improving their performance because it enabled them attend school regularly and studied more effectively. He found that in study carried out in Jamaica, children in Grade 2 scored higher in Arithmetic when they started being fed at school. However, the impact of school feeding programme on the academic performance of pupils has been embraced with mixed feelings. It was observed that although h SFPs motivate parents to enrol their children in school, its impact on academic performance is mixed and depends on various factors within the context in which the programme is set. This study reveals that the mean amount the caregivers were willing to pay yearly for school feeding. In the urban areas we have N2, 053.35 while in the rural areas we have N671.32. This findings were quite discouraging and might not be consistent with the finding from the study done by Falade OS et al in 2012, where the cost of the school meal was (N30:00) per child per day approximately N1,500-N1,800 per term. Considering the current economic situation in the country and inflation rate, one will be expecting something reasonable higher from the caregivers because there is a very big gap in the cost of school meal in the year 2012 and year 2018.

CONCLUSION

The importance of school feeding practices among our children can never be over emphasized. Most times, especially in our context, we usually have very good ideas up for beautiful programs start up but along the line the whole thing fizzles out due to lack of planning on sustainable measure. The school feeding program which was launched in Nigeria in 2005 and later relunched in 2016 should not be allowed to end up but can be a owned programs. The findings from this study suggested that government should pay attention to some vital issues such as dietary standard of the meals, the hygiene condition on which the foods are being prepared and served, having different packages based on affordability, ensuring proper supervision and putting some regulations in place to ensure quality in the programme.

RECOMMENDATIONS

1. There is a need to reach out to the people for whom a program is being designed for, find out what they expect from the programme, how best it can be carried out to achieve success at the planning stage before roll-out.

2. There should be different packages of food - in sizes and amount though essentially, basically the same quality, so that people can easily make choices.

3. School feeding programme should be improved upon by government and extended to all schools to relieve caregivers the burden of waking up very early in the morning to prepare foods for their wards.

4. The dietary concerns should be addressed by ensuring that well-trained dieticians are involved in selecting and cooking the meals.

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CONFLICT OF INTEREST Authors declared no conflict of interest

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