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INFLUENCE OF SOCIO-ECONOMIC STATUS ON INTAKE OF LUNCH BY SCHOOL AGE CHILDREN

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ABSTRACT

This study was carried out to assess the influence of socio-economic status on intake of lunch in school age children from ten public primary schools in Ondo Town. A cross-sectional survey was conducted among 150 primary school children aged 6-12 years old. The instrument used for this study was structured interviewer-administered questionnaire which contained questions on the socio-economic and the dietary pattern. Data showed that, majority of the respondents were female (52.0%); their age range was between 7-12 years. Most Mothers were traders (50.0%), from the Yoruba ethnic group (71.3%). The family type was majorly monogamy (74.0%) and majority (59.3%) were Christians. Those who ate three times a day were (72.0%) and the food they liked most (54.0%) was rice. The study revealed that the lunch eaten by the children were mostly bought from the school vendors. It was also found that the quantity of food taken by the children were inadequate to sustain them in the school because of little amount of money given to them by their parents. From the findings, the respondents did not consume qualitative and quantitative diets that can help in growth and development. Therefore, the government should give a feeding guideline to the schools; and the food vendors should be given nutritional education in form of workshops, to enhance the quality of school meal they serve the students, this in turn may be beneficial in improving the nutritional status and academic performance of public school children in Ondo town and Nigeria as a whole.

Keywords: economic status, children, lunch, primary, school, Ondo town

INTRODUCTION

Ondo town is about 48 kilometres from Akure, the capital of Ondo state, Nigeria. Ondo has a language that is clear and understandable and can be comprehended by any person who understands Yoruba language. Ondo people are unique when it comes to food despite the prominence which some food items like rice, meat pie among others are gaining in the contemporary society (Oyesola, 2009), and still give recognition to local delicious foods like pounded yam, eba and purupuru.

According to 2006 population census data, the numbers of Ondo people in Ondo State were about three million, four hundred and forty thousand.

School meal provision was initially introduced in the mid-19th Century as a public health response to under-nutrition of children and subsequent poor health of potential army recruits for the Boer war (Cavangi, 1989). The school meal serves as a means of providing nutrition to children regardless of social background, and potentially, also as a means of translating the taught curriculum on

nutrition into practice. Nutritional and Health status have powerful influence on a child's learning ability and school performance (Serdula, 2001). When children enter school and begin to participate in organized sports and other activities that result in an increase in physical activity, their appetite and food intake usually increase (Maham, 1996). Access to a nutritious mid-day or afternoon meal is very important determinant of nutritional status as well as the overall- wellbeing and cognitive development of school children. Students who have a certain micronutrient deficiency or suffer from protein energy malnutrition do not have the same learning potential as healthy, well –nourished children (Bevan, 2011). In addition, hungry children may have difficulty with concentrating in or performing academic activities even if otherwise healthy and well nourished (UNICEF, 2002). If children establish healthy habits, their risk for developing many chronic diseases will be greatly decreased. On the other hand, poor eating habits and physical inactivity during childhood set the stage for health problems in adulthood according to America Dietetics Association (ADA, 1999). Moreover, apart from contributing to a child's daily nutrient requirements, meals provided during school hours alleviate short term hunger, increase attention span, facilitate learning and avoid the need for children to leave school in search of food (Akanbi, 2011). It has been shown that early nutritional improvements can have a powerful positive impact on the population's health, also help in economic development (Iram and Butt, 2006). Therefore, this study was carried to determine the influence of socio-economic status in intake of lunch on school age children of ten (10) public primary schools in Ondo Town, Ondo State, Nigeria.

MATERIALS AND METHODS

Sample collection

The study was carried out in ten public primary schools in Ondo Town, Ondo State. This project was cross sectional study including public primary

schools of age 6-12 years old. The population for the study consisted of one hundred and fifty (150) respondents targeted at Ondo town. Sample collection was done in such a way that all categories of children in primary school had chance of being selected according to their specific age (6-12).

Research Instrument

The instrument for this study was self-administered interview questionnaires which had two (2) sections. The first section elicited information about socio-economic characteristics of the respondents, the second section elicited information on eating pattern. The socio-economic background was judged through occupation of the parents rather than monthly income. It was assumed that young children would be able to know the occupation of their parents than the monthly income.

Data collection

Permission was sought from headmaster of each school. The questionnaire was administered to one student at a time without influencing their choice. The questionnaire was structured in a simple way to be understood by the students.

Data Analysis

The data was analysed using Statistical Package for Social Science (SPSS) version 17. Descriptive statistical techniques such as frequency, percentage and mean were used to describe all categorical data variables.

RESULTS

Socio-Economic Characteristic of the Respondents

It was shown from the results that the socio economic status of the respondents increased with classes. Primary 4 had (44, 29.3%), Primary 5 had (48, 32.0%) while Primary 6 had (58, 38.7%) respectively. The age distribution of the

respondents shown in table 1, portrayed that the higher the age interval of the respondents, the higher the frequency and percentage as shown 7-8 (27, 18.0%), 9-10 (57, 38.0%) and 11-12 (66, 44.0%) in an increasing order. It was observed that majority of the respondents were female (78, 52.0%) while the Male respondents were (72, 48.0%). Most of the respondents were Christians (89, 59.3%), Islam (57, 38) and traditional religion (4, 2.7%) respectively. Monogamy was much more practiced by their parents when compared to polygamy and 99% of the parents were still alive. Also, majority of the parents have three children and the respondents were majorly second born in the family. Most of the respondents were from the Yoruba ethnic extract (71.3%) the Igbo (17.4%) and Hausa (11.3%). Half of the mothers of the respondents were into trading (50%) while the fathers were mostly civil servants (55%).

Eating Patterns

The finding about the time the respondents eat per day revealed that almost three quarter of the respondents ate three times a day (108, 72.0%). It was observed that 46.3% of the respondents skipped dinner, 31.7% lunch while 22.0% breakfast. Majority of the students (91.3%) received money for the lunch from their parents. Then, half of the respondents liked rice most (54%) and 28.7% ate rice at school as lunch, snacks (22%), beans and dodo (20%), yam porridge (16%) and indomie (13.3%) and snacks (22%) It was observed that only six percent (6%) consumed fruits and vegetables everyday while ninety four percent (94%) did not consume it at all. Also, almost all the students liked buying school meals (87.3%) and few brought foods from home.

Table 1: Socio-demographic characteristics

Socio-Demographic variables	Frequency (N)	Percentage (%)
Classes of respondents		
Primary 4	44	29.3
Primary 5	48	32.0
Primary 6	58	38.7
Total	150	100
Age interval in years		
7-8	27	18.0
9-10	57	38
11-12	66	44
Total	150	100
Gender		
Male	72	48.0
Female	78	52.0
Total	150	100
Religion		
Christianity	89	59.3
Islam	57	38.0
Traditional	4	2.7
Total	150	100
Family type		
Monogamy	111	74.0

Polygamy	39	26.0
Total	150	100
Position in family		
First born	41	27.3
Second born	61	40.7
Third born	35	23.3
Other	13	8.7
Total	150	100
Parent existence		
Yes	148	98.7
No	2	1.3
Total	150	100
Parent number of children		
One	16	10.6
Two	55	36.7
Three	72	48.0
More than three	7	4.7
Total	150	100
Ethnicity		
Yoruba	107	71.3
Hausa	17	11.3
Ibo	26	17.3
Total	150	100
Mother's occupation		
Civil servants	48	32.0
Traders	75	50.0
Farmers	16	10.7
Others	11	7.3
Total	150	100
Father's occupation		
Civil servant	55	36.7
Trader	40	26.7
Farmer	50	33.3
Others	5	3.3
Total	150	100

Table 2: Eating patterns

Eating patterns variables	Frequency	Percentage
Eating numbers per day		
Once	0	0.0
Twice	40	26.7
Thrice	108	72.0
More than thrice	2	1.3
Total	150	100
Meal skipped		
Breakfast	9	22.0
Lunch	13	31.7
Dinner	19	46.3
Total	41	100
Best food		
Fruits	19	12.7
Rice	81	54.0
Beans	30	20.0
Others	20	13.3
Total	150	100
Type of food eaten at school lunch		
Indomie	20	13.3
Snacks	33	22.0
Rice	43	28.7
Beans	30	20.0
Others	24	16.0
Total	150	100
Eating fruits and vegetable everyday		
Yes	9	6.0
No	141	94.0
Total	150	100
Buying lunch at School		
Yes	131	87.3
No	19	12.7
Total	150	100

DISCUSSION

The study revealed that majority of the pupils were from monogamy family and their parents were still alive. The mothers had no formal education which may contribute negatively to their lack of knowledge in giving adequate diets to their children. Keino (2004) reported that the educational level of individual significantly affected their health and nutritional status. However, the socio-economic and socio-cultural such as ethnicity, parent type of education levels, and time constraints always had influence on the type of food the children eat (Heather and Nicklas, 2005). Brown (2006) emphasizes on importance of having a stable family structure for the child health development and well-being. Mothers with higher level of education are believed to be more knowledgeable on the role of food on the health status of children compared to less educate ones (Vereecken, 2010). Inadequate nutrient intake during childhood leads to under nutrition, which results in decreased cognitive function, growth failure, greater developmental delays, diminished resistance to infection and therefore leads to decrease in economic productivity (Mukherjee *et al.*, 2008; Iram and Butt, 2006; UNICEF, 2006). This finding is at variance with some report that had linked poor access to food and poor nutritional status of children with a large family size (Babar, 2010). However, family size may be poor indicator of access to food because majority of the mothers were traders.

Lunch meal plays an important role in the dietary intake of the children. Healthy eating habit among children plays a key role in their mental and physical development, promote growth and reduce risks associated with short and long time health problems (Bordi *et al.*, 2002). It is so interesting that rice consumption at lunch was more prevalent among the respondents, this was in accordance with Ijarotimi and Ijadunola (2007) which observed that large proportion of children dietary intake were starchy based in Akure, Ondo State. Even though many of these pupils did not

consume fruits and vegetable at all and this may lead to lack of micronutrients that are needed for growth and development. Research had shown that proteins and micronutrients are important for physical growth and cognitive development of the children (Krebbs and Westcott, 2002; Neumann *et al.*, 2002). Children require adequate supply of nutrients for growth, development, energy and to maintain body function. This study indicated that a lot of attention should be on the feeding of public primary school children. If the Millennium Development Goal of universal basic education must be achieved in Nigeria, in view of the contribution of poor nutrition to school absenteeism, early school drop-out, poor classroom performance and poor cognitive development of school- age children (UNICEF , 2002).

On the other hand, 90% of public schools pupils received money from their parents to buy food in the school but end up buying snacks. It was found that the food bought from school vendors by the pupils might not be adequate compared to the long hours spent in school. Florence *et al* (2008) revealed that diet adequacy, variety and increased consumption of fruits and vegetables as aspect of diet quality important for academic performance. Olanipekun *et al* (2012) highlighted the significantly higher rate of malnutrition among pupils in Nigerian primary schools. The difference in the school meal served by the school vendor by the different types of school attributed to the difference in the socio-economic status of parent.

Although the pupils buying schools lunch were 90%, only few (less than 10%) had adequate and quality meals. A good quality meal will improve nutritional status which is vital for mental development and consequently academic performance (Musamali *et al.*, 2007). It was observed that many of these pupils skipped breakfast; this may be due to the nature of work of the mothers and their lack of knowledge about the importance of breakfast. Keski-Rahkonen *et al* (2003) discovered that skipping breakfast is

associated with health compromising behaviour in adults and adolescents. The major contributors to childhood malnutrition are poverty, low level of education and poor access to health services (UNICEF, 2006). The results of this study revealed that feeding guideline and nutritional education may be beneficial in improving the nutrition of public school children, in the absence of government sponsored school food programmes. Mothers often cite lack of knowledge in addition to lack of time or resources and family or child preference as barrier to providing adequate diets for their children (Briley *et al.*, 2012).

CONCLUSION

This research investigated the socio-economic characteristics and the eating patterns of the Children aged 6-12years old. Finding revealed that the main meal taken by the children was lunch and was bought in the school. It was found that the quantity of food taken by the children was not sufficient to sustain them due to the amount of money given to them by their parents. Furthermore, the consumption of fruit and vegetables were very low, parents need to be educated on the importance of fruits and vegetables in the feeding pattern of their children. Feeding guideline and nutritional education may be beneficial in improving the nutrition of public school students.

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