



FOOD SELECTIVITY AND HEALTH IMPLICATION OF CHILDREN OF GROWING AGES IN CALABAR SOUTH LOCAL GOVERNMENT AREA, CROSS RIVER STATE, NIGERIA. WEST AFRICA

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ABSTRACT

Healthy eating habits help to keep children of growing ages nourished and free from chronic diseases like obesity, heart disease and diabetes. Most children of growing ages (1-5years old) in Africa find it difficult to maintain a good feeding habit either due to personal habits of only preferring a particular diet, genetic factor or poverty. Food selectivity is the habit of refusing to eat a variety of foods. The aim of this research was to examine food selectivity and health implication in children of growing ages in Calabar South Local Government Area of Cross River State, Nigeria, West Africa. In pursuant of this aim, three research questions were formulated to guide the study. Two instruments-Questionnaires and oral interview were used to collate data from 384 parents from health institutions and schools across five major communities in the area. Two sampling techniques, the purposive and simple random sample techniques were employed to select sample for the study. The researcher adopted the survey design method. The findings of the study revealed a significant ($p < 0.05$) impact of food refusal, food poverty and single frequency food intake on the health of children in Calabar South Local Government. Based on the results it was recommended that parents should feed their children with varieties of balanced diets, make baby meals appetizing and adopt gentle and persuasive approaches when feeding their babies.

KEYWORDS: Food, selectivity, Health, children.

INTRODUCTION

Food is a universal need. It has the potential to be a site of universal experience, a mark of communal cohesion and a solidifying social force. Many children go through a fussy eating stage and many of us still have few foods that we still don't like as adults. King, Butte and Bronstein (1994) observed many contributing factors that can lead to extreme food selectivity in children. Austicanim (2001), found that eating diet high in sugar, fat, and processed food at the age of three is associated with low (IQ).

It is important to note that selective eaters are children who have aversions. Like favourite childhood scars, food aversions are deeply personal, often come with a back-story and are ripe for comparing with others. Reddy (1975)

observes that part of the fun of food aversions discussion is trying to explain them. People sometimes deduce that children are allergic to certain foods. Selective eaters may avoid all cereals, all meats, all cold foods, all food with red colour, all crunchy foods, all fruits and vegetables etc. Many food selective children we see, eat no more than a few foods, some people (especially kids) are simply more food neophobic- less accepting of new tastes than others, that can be measured, otherwise flavor preference can be learned.

Food refusal and health implication in children

Food refusal has been described and defined in a variety of ways. It has been described as a general term that embraces a wide range of a child's feeding problems (Douglas, 2002)

and alternatively as a more specific type of feeding problem, defined as a child's refusal to eat all or most foods presented, resulting in the child's failure to meet his or her caloric or nutritional needs (Field, Garland, & Williams, 2003). Food refusal has also been defined both in terms of decreased appetite (Stainano, 2003) and the specific behaviors often associated with the refusal of food such as head turning and mouth closure contingent upon the presentation of food, spitting out food, dawdling, gagging, and even vomiting (Lindberg, Bolin, & Hagekull, 1994).

These variations in the definition of food refusal reflect the more general state of the field, where, to date, there is little consensus on defining childhood feeding disorders and no universally accepted classification system for childhood feeding disorders (Kedesdy & Budd, 1998). The term, food refusal, seems to imply that the child controls his or her intake.

Food poverty and health implication of children

Within a social exclusion framework, food poverty refers to the inability to have an adequate and nutritious diet due to issues of the affordability of and access to food (Dowler, 1998). In addition to hunger, which may be thought of through the concept of food security, is described as the inability to acquire or consume an adequate quality and sufficient quantity of food in socially acceptable ways (Radimer et al. 1992). In nutritional terms food poverty may be defined as the consumption of too little food to meet basic nutritional requirements.

Diet plays a very prominent role in premature death from a number of chronic health conditions including cardiovascular disease and some cancers (Block et al, 1992). As in many developed countries, Ireland experiences marked social inequalities in health, seen in the variation in health outcomes, especially mortality, across the different social groupings. It is recognised that some of the inequalities in health may be partly explained by social inequalities in dietary behaviours and that the impact of inadequate nutritional intake on health is related to basic social inequity. Whilst food is clearly very influential on health, a more sociological interpretation of food poverty finds that food-poor households and individuals are at risk of compromised social behaviour (Dowler 1998). Just as income poverty has a constraining effect on the way people live their lives, so related food poverty affects social behaviour and causes or exacerbates social exclusion.

Frequency food intake and health of children

Few studies have attempted to assess the ability of children and adolescents to quantify portion sizes. The results of these studies have been inconclusive and contradictory

(Livingstone & Robson 2000). Children generally have difficulty in estimating portion size. A recent review was unable to make guidelines for portion size estimation for children or even adults. Training has been shown to improve portion size estimation among children, however, even with training some errors were reported to be as high as 100% (McPherson 2000). Estimating the amount of food consumed is a complex task, even for adults. It requires that children can recognise and describe quantities in terms of proportions or whole units, that they have an adequately developed concept of time to express food intake in terms such as frequency and averages, and finally, it assumes that the child can think abstractly about food while viewing generic food models/photographs of different volumes and dimensions (Livingstone & Robson 2000).

To confound the problem is that the food frequencies and portion sizes of children are not constant over time and it is also most unlikely they pay attention to frequencies and portion sizes they are eating (Livingstone & Robson 2000). Given the substantial error documented in portion size estimation among adults, food intake for children should not place a high priority on portion size estimation (Cullen et al. 1998). Overestimation of portion sizes tends to be greater in individuals who eat smaller portions and underestimation among those who eat larger portions (Biro 2002). Generally, overestimation of portion sizes appears to be more frequent than underestimation (Biro 2002, McPherson 2000). These tools can confuse children at best or exacerbate the problem at worst (Livingstone & Robson 2000).

Research questions

The following questions provided a guide to the study

1. To what extent does food refusal affect the health of children in Calabar South Local Government Area?
2. To what extent does food poverty influence the health of children in Calabar South Local Government Area?
3. To what extent does high single frequency food intake affect the health of children in Calabar South Local Government Area?

Objectives of the study

The main purpose this study was to find out the food selectivity of children of growing ages and their health implication in Calabar south area council of Cross River State.

Specifically the study investigated

1. To examine how food refusal affect the health of children in Calabar South Local Government Area?
2. To determine the extent which food poverty influence the health of children in Calabar South Local Government Area?
3. To examine the impact of high single frequency food intake on the health of children in Calabar South Local Government Area?

Research Hypotheses

The following hypotheses are formulated in other to guide this study.

1. There is no significant effect of food refusal on the health of children in Calabar South Local Government Area
2. Food poverty does not influence the health of children in Calabar South Local Government Area
3. There is no significant influence of high single frequency food intake on the health of children in Calabar South Local Government Area

Significance of the study

This study could be of great benefit to the following groups of people the parents, general society, health providers, educational planners and policy makers and researchers. This study could serve as eye-opener to parents as they will come to appreciate the influence of early children experience on the life of their children. Parent could also come to know that eating habit depends on parental upbringing for growth. Parent could understand that it is necessary to show affection for their children and help them understand food choices to enable a healthy living for their children.

Teachers who read this study could become aware of the need to cultivate good teacher pupil relationship as a means of helping to make up for what the children could not get from their parent. Teachers could influence the pupils through nutrition education on the relevance of adequate eating. To the health worker, the learn from this study on ways of advising mothers during their maternity days on issues of health complications that may arise from inadequate feeding practices like autism, which in variably lead to “picky eating”. Educational planners and policy makers who may come across this study can use the result as the basis for curricular review involving how to help children prevent malnutrition and to plan programmes like school feeding programmes that can correct or shape children attitude towards feeding habit. By reading this study, the adult member of the society could come to know that they too have a part to play in children feeding behavior. They could help to create social awareness of the problem of inadequate nutrition. This will help the general public to realize the need for proper feeding and how to bring up their child to have positive attitude towards healthy feeding. Finally, upon completion of this study it will contribute immensely to the literature in this area. It will help for further research.

Scope of the study

This study is limited to children in calabar South Local Government Area of Cross River State. It is limited to food

refusal, food poverty and high single frequency food intake as specific variable used for the study.

Limitation of study

During the course of this research, there were certain limiting factors that the researcher encountered. The researcher had problems with logistic as most hinter lands could not be reached. There was also financial problem as money was needed for questionnaires and transportation.

METHOD

The researcher adopted the survey design method. A pilot test exercise was carried out using 15 respondents from the population in one of the Local government council which is not part of the selected communities for the purpose of establishing the reliability of the questionnaire. Cronbach alpha approach was used to establish the reliability of the questionnaire to determine the reliability coefficient of the instrument. The instrument was structured into four points like a scale of strongly agreed (SA), Agreed (A), disagreed (D) and strongly disagreed (SD). The scale was assigned with values of 4, 3, 2, and 1 respectively for positively structured statement while reversed order was assigned for negatively structured statements. The Analysis was based on simple percentage and mean value. The items of the instrument were structured to reflect the three variables under consideration. Value with percentage higher than fifty (50%) and mean value higher than 2.50 were considered appropriate to have exerted a significant influence on a given variable while percentages values lower than the average was unsatisfactory in terms of influence on the health of children. Result of the analysis was generated using descriptive and analytical statistics. The three formulated hypotheses were tested using chi-squared and simple percentages and elicited data analyzed at 0.05 level of significance. The items in the instruments and the responses are structured in the table 1 below.

Table 1: CFSI and Responses (N= 200) SA=Strongly Agree, A=Agree, D=Disagree, SD=Strongly Disagree.

S/N	Variables / items	SA	A	D	SD	MEAN
Sub-scale One: Food refusal						
1.	Food refusal may not result in child's failure to meet his or her caloric or nutritional needs	20 10%	45 22.5%	50 25%	85 42.5%	2.65
2.	Food refusal may result in neurological conditions and cardio respiratory disease.	105 52.5%	35 17.5%	25 12.5%	35 17.5%	3.05
3.	Food selectivity does not affect nutritional development in children.	20 10%	45 22.5%	50 25%	85 42.5%	2.97
4	Children food refusal can result to nutritionally deficient diets and malnutrition.	107 53.25%	33 16.5%	41 20.5%	19 9.5%	3.14
5	Food refusal might not really be the cause of gastro esophageal reflux and cardiopulmonary conditions	75 37.5%	25 12.5%	59 29.5%	41 20.5%	2.33
Sub- Variable Two: Food poverty						
6.	Food poverty is due to issues of the affordability of and access to food	12 6%	95 47.5%	83 41.5%	10 5%	2,54
7	Inability to acquire or consume food is not due to food poverty	0 0%	51 25.5%	50 25%	109 54.5%	2.80
8.	Food poverty may lead to compromised social behavior	75 37.5%	24 12%	11 5.5%	90 45%	2.41
9	Low class individuals have significantly lower intakes of foodstuffs regularly.	84 42%	39 19.5%	45 22.5%	32 16%	2.54
10	Access to healthy food is not determined by what is available to buy and what people can actually afford.	58 29%	50 25%	22 11%	70 35%	2.23
Sub scale three: High single frequency food intake						
11.	Proper frequency food intake is a healthy feeding habit	75 37.5%	85 42.5%	14 7%	26 13%	1.95
12	Poor proper food frequency can lead to malnutrition	12 6%	80 40%	28 14%	80 40%	2.12
13.	Lack of consistent fruit intake may lead to cancer	49 24.5%	56 28%	45 22.5%	49 24.5%	3.31
14	In my community, many children do not eat good food	138 69%	42 21%	18 9%	2 1%	1.39
15	Proper intake of balance diet may not improve the health of children	25 12.5%	15 7.5%	43 21.5%	117 58.5%	3.31

DISCUSSION OF RESULT

The data analysis was based on simple percentages and mean value obtained in each item in the instrument. Table 1 above shows the item by item distribution and the respective values. The average mean value of 2.50 was considered as a reference mean based on either positively or negatively structured statement in each item. The percentage value of 50% was equally considered for reference. Thus, the values above the reference mean of 2.50 and 50th percentile was considered to have exerted a greater influence on the variable while values below the reference mean of 2.50 was said to have less significance influence on the variable under consideration.

In research question 1- To what extent does Food refusal affect the health of children in Calabar South Local Government area. It was found that most items have mean values significantly above the reference mean of 2.50. This

implies that, food refusal affect the health of children of growing ages significantly. This result agrees with the assertion of (Field, Garland and Williams, 2003) that food refusal would result in failure to meet caloric and nutritional needs of children.

Research Question 2- To what extent does food poverty influence the health of children in Calabar South Local Government Area? The indices here revealed that the mean value and percentages calculated were remarkably above average. The implication here is that, food poverty has a significant effect on the health of children. This result is in tandem with the position of (Dowler, 1998) who asserted that food-poor households and individuals are at risk of compromised social behaviour.

In research question 3- To what extent does high single frequency food intake affect the health of children in

Calabar South Local Government Area?. The analysis revealed that the mean value of 2.50 was also exceeded. It implies that high single frequency food intake in children lead to poor growth pattern and several health challenges in children of growing ages. The results tend to conform with (Austicanim, 2001) assertion that eating diet high in sugar, fat, and processed food at the age of three is associated with low (IQ) levels in children.

CONCLUSION

In conclusion, the results led credence to the fact that, food refusal, food poverty and high single frequency food intake poses serious health challenge and poor growth pattern on children of growing ages

RECOMMENDATIONS

Parents should feed their children with varieties of balanced diets, make baby meals appetizing and adopt gentle and persuasive approaches when feeding their babies. Also, the society should be actively involved in child's feeding process through child's food/feeding awareness programmes

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