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Original Research Article

Risk Factors Predisposing Children to Malnutrition in Okigwe Local Government Area of Imo State, Nigeria

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Abstract

In Nigeria, malnutrition is widespread, particularly in the rural areas. This is partly due to inadequate food and low standard of living. Hence this study was aimed at ascertaining risk factors predisposing children to malnutrition in Okigwe Local Government of Imo State. Specifically, the study sought to examine the impact of poverty on the abilities of families to afford a balanced diet for their children, identify specific food preference among children and how they contribute to malnutrition, identify cultural practices and beliefs that affect child feeding and nutrition and examine how educational levels of parents correlate with their ability to make informed nutritional decision for their children. The study adopted a survey descriptive research design. A target population of 13, 325 women between the ages of 15-45 years (25% of estimated population) was used for the research. This study adopted Taro Yamen's formulae to determine the sample size from the population. Multi stage sampling technique was also used. Self-administered structured questionnaire with closed-ended questions was used for data collection for this study. Data collected wereanalyzed using frequencies and percentages. Findings from the study revealed that poverty has a negative impact 365 (97.3%) on abilities of families to afford a balanced diet for their children which in turn, predisposes children to malnutrition. The study also revealed that Specific food preferences that can contribute to malnutrition among children include, preference for sugary food 300 (80%) preference for high fat foods 285 (76%), preference for highly processed foods 305 (81.3%), preference for sugary drinks 297 (79.2%), preference for junk foods 325 (86.7%) and that preference for foods that are high in salt or fat 275 (73.3%) are the specific food preference that can contribute to malnutrition among children. Additionally, the study revealed that belief that children should be feed with certain types of food 325 (86.7%), forbidding children on eating during certain times of the day 297 (79.2%), belief that children should only eat certain amount of food 305 (81.3%), belief that children should not eat certain types of food like eggs 326 (86.9%) and belief of seeing certain food as unclean or impure 240 (64%) are some of the cultural practices and beliefs that can that affect child feeding and nutrition in Okigwe. Finally, the study revealed that there is a strong positive correlation 300 (80%) between educational level of parents and their ability to make informed nutritional decision. It is therefore recommended, that Governments in all parts of Nigeria especially in Okigwe L.G.A should prioritize reducing poverty and hunger, as this would have a significant impact on health and economic outcomes. It is also important to enlighten parents on those cultural belief and practices that are capable of exposing children to malnutrition so that they may put a stop to those practices especially in areas where children are affected by those cultural beliefs and practices

Keywords: Children, Malnutrition, Poverty, Predisposing, Risk Factors

INTRODUCTION

Childhood malnutrition has remained a significant health issue in developing nations, Nigeria inclusive. According to the World Health Organization, malnutrition affects up to 800 million people worldwide. WHO also estimated that over half of childhood deaths in developing countries are linked to malnutrition. Hence, it is estimated that nearly 30% of the world's population is suffering from some form of malnutrition. Malnutrition refers to the situation where there is an unbalanced diet in which some nutrients are in excess, lacking or in wrong

proportion. Simply put, it can be categorized as under-nutrition and over-nutrition. Malnutrition is a term used to describe a range of conditions resulting from poor nutrition, including under-nutrition and over nutrition. Under nutrition occurs when a person does not consume enough nutrients or calories to meet their body's needs, while over nutrition occurs when a person consumes too many calories or nutrients. Malnutrition can lead to a range of health problems, such as stunted growth, anemia, and heart disease. It is a significant public health issue that affects people of all ages and socio-economic backgrounds, and it is estimated to contribute to more than half of all child deaths worldwide.

Several authors have defined malnutrition. For example, Prentice, Ziegler and Black, (2015) defined malnutrition as the impaired health due to inadequate, excess, or imbalanced intake of protein, energy, and micronutrients. American Journal of Clinical Nutrition in (2015), defined malnutrition as a state in which the body is deprived of the nutrients required for normal function and maintenance (Jones, (2016). Similarly, according to the World Health Organization (WHO), malnutrition is a state in which a deficiency, excess, or imbalance of energy, protein, and other nutrients causes measurable adverse effects on tissue/body form (body shape, size, and composition) and function and clinical outcome. WHO further stated that malnutrition can be divided into two categories: undernutrition and overnutrition. Undernutrition includes stunting, wasting, and micronutrient deficiencies, while overnutrition includes obesity and being overweight. Both types of malnutrition can have serious health consequences.

Based on the afore mentioned, American Dietetics Association (2019), opined that malnutrition as a clinical condition characterized by altered body composition (body mass or body composition indices) that results from insufficient or excess intake of energy and/or nutrients. This definition emphasizes the importance of body composition and nutritional status in diagnosing malnutrition. The author also noted that malnutrition can be classified as either mild, moderate, or severe based on the degree of alteration in body composition. Going further, Mathers, and Nissen, (2017) defined malnutrition as a condition resulting from insufficient, excessive, or imbalanced intake of energy and/or nutrients leading to a pathological state. This definition emphasizes the importance of both inadequate and excessive intakes of nutrients and energy in causing malnutrition. The authors also noted that malnutrition can be acute or chronic, mild or severe, and can be due to multiple factors. In addition to the above definition, the United Nations Children's Fund (UNICEF) (2017), defines malnutrition as the cellular imbalance between the supply of nutrients and energy and the body's demand for them to ensure growth, maintenance, and specific functions. This definition highlights the importance of both undernutrition and overnutrition in causing malnutrition, and It also emphasizes the importance of cellular imbalance in causing the condition.

Malnutrition is a common health condition caused by an imbalance in the intake of nutrients and energy. It is one of the leading causes of death in children under the age of five, and it can have long-term effects on a child's health, including decreased learning ability, reduced efficiency, and impaired ability to acquire skills. In Asia and Africa, malnutrition is responsible for the death of nearly half of all children under the age of five. Inadequate nutrition also increases the risk of death from common infections, and can make them more severe and slow recovery. Globally, children under the age of five are particularly vulnerable to health issues, including malnutrition. This condition is prevalent not only in developing countries, but also in more developed nations. In fact, according to the World Health Organization's (WHO) 2012 Progress Report, hunger and malnutrition are still some of the most pressing problems faced by the world's poorest communities.

Daelmans and Saadeh (2013) have highlighted the importance of addressing childhood malnutrition in order to achieve international goals to reduce malnutrition and child mortality. Therefore, child growth is an internationally recognized indicator of public health. Multiple efforts are underway, both globally and locally, to reduce the burden of malnutrition, especially in developing nations. The fourth Millennium Development Goal aims to reduce under-five mortality by two-thirds by the year 2015. As a result, there has been a push for more integrated and holistic strategies to maximize benefits for vulnerable groups, particularly children. Exclusive breastfeeding and promoting nutritionally adequate diets for children under five years old have been identified as key interventions in reducing malnutrition.

In 1979, the World Health Organization (WHO) and the United Nations Children's Fund (UNICEF) recommended that babies should be exclusively breastfed for the first 4-6 months. However, a WHO expert committee report in 2001 concluded that, for optimal nutrition, exclusive breastfeeding for a full 6 months is essential. Field studies have shown that complementary foods introduced between 4 and 6 months of age do not improve growth or development, and they may actually replace nutrients from breastfeeding (Dewey et al., 2019; Gupta et al., 2012). In response to the evidence that 6 months of exclusive breastfeeding is optimal for infant health, UNICEF and the Ministry of Health have recommended exclusive breastfeeding for the first 6 months of life. While over 95% of children under 5 years old in Africa are breastfed, it is often inadequate, as many people give their infants water and other liquids in addition to breast milk. This has led to low rates of exclusive breastfeeding, particularly in West Africa (Linkage, 2012).

Despite economic development in some countries,

childhood malnutrition remains a significant health issue in developing nations. With this in mind, this study was conducted to ascertain the factors that predisposes children to malnutrition in Okigwe L.G.A of Imo State

STATEMENT OF THE PROBLEM

In Nigeria, malnutrition is widespread, particularly in the rural areas. This is partly due to inadequate food and low standard of living. The Nigeria Demographic and Health Survey (2018) revealed 2018 that 38% of under-five children in Nigeria are stunted, 29% underweight and 9.2% wasted (Hernández et al., 2018). Nutritional status can be quantitatively evaluated by assessment technique that provide information on the nutritional and health status of children which are indirect measures on the quality of life in a given Community.

Malnutrition can also be evaluated by anthropometric measurements (involving height, weights, skin fold, etc), clinical examination, biochemical tests and use of dietary history. Illiteracy and poverty may influence the food intake of people in a Community and become causes of malnutrition. There are immediate, underlying and basic causes of malnutrition, including poor diet and disease, underlying causes are inadequate maternal and child care, unhealthy environment and poor or insufficient health services, while the basic causes are political, cultural, environmental, and social factors. Any of the above or combination of one or more one of the above-mentioned factors can contribute to the causes of malnutrition.

Malnutrition can increase mortality rate, poor wound healing, oedema, anaemia, jaundice, liver, kidney or heart failure. The metabolic effects of over nutrition, or obesity, include heart disease, diabetes, stroke, high blood pressure and certain cancers. Proper balance diet is the most adequate measure in managing malnutrition. The absence of reliable statistical information and baseline data on malnutrition among rural children under the age of five years has been a major obstacle to efforts made by the Ministry of Health. Giving the importance of the knowledge of malnutrition, its effects and consequences, this study investigated factors that predisposes children to malnutrition in Okigwe L.G.A of Imo State.

OBJECTIVES OF THE STUDY

The general objective of this study is to investigate risk factors that predisposes children to malnutrition in Okigwe L.G.A of Imo State. Specifically, the study sought to:

1. To examine the impact of poverty on the abilities of families to afford a balanced diet for their children

2. To identify specific food preference among children and how they contribute to malnutrition

3. To identify cultural practices and beliefs that affect child feeding and nutrition in Okigwe

4. To examine how educational levels of parents correlate with their ability to make informed nutritional decision for their children

RESEARCH QUESTIONS

The following research questions guided the study:

1. What is the impact of poverty on the abilities of families to afford a balanced diet for their children?

2. What are the specific food preference among children that contribute to malnutrition?

3. What are the cultural practices and beliefs that affect child feeding and nutrition in Okigwe?

4. What is the correlation between educational levels of parents and their ability to make informed nutritional decision for their children?

METHODOLOGY

The study adopted a survey descriptive research design. The area of study is Okigwe Local Government Area. Okigwe Local Government Area is one of the 27 Local Government Areas in Imo State. According to data gotten from National Population Commission (2020), a projected target population of 13, 325 women between the ages of 15-45 years (25% of estimated population) was used for the research.The study included all mothers within the communities with biological children less than 10 years. 388 respondents constituted the sample for this study. Taro Yamen formula was used to determine the sample size while multi stage sampling technique was used to sample the respondents.

Self-administered structured questionnaire with closed-ended questions was used for data collection for this study. The questionnaire was divided into four sections;

Section A: is for the demographic information of the respondents,

Section B: consist of question on impact of poverty on the abilities of families to afford a balanced diet for their children**; Section C:** consist of questions on specific food preference among children and how they contribute to malnutrition; **Section D**: Consists of questions on cultural practices and beliefs that affect child feeding and nutrition in Okigwe while **Section E**: Consists of questions on the correlation between educational levels of parents correlate with their ability to make informed nutritional. The questionnaire was a structured and unstructured questionnaire.

Three (3) field assistants were recruited and trained by the researcher. The researcher and the research assistant visited various sampled villages in Okigwe

Table 1. Socio-demographic characteristics of respondents

Characteristics	**Frequency**	**Percentage**
Age Range	**Frequency**	**Percentage**
Below 20years	31	8.3
21 - 30	201	53.6
31 – 40	108	28.8
41 - 50	35	9.3
50 years above	0	0
Total	**375**	**100**
Educational level	**Frequency**	**Percentage**
No formal Education	36	9.6
Primary School	96	25.6
Secondary School	211	56.3
College/University	32	8.5
Total	375	**100**
Occupation	**Frequency**	**Percentage**
Employment (full-time)	75	20
Employment (part-time)	97	25.9
Self employed	135	36
Unemployed	50	13.3
Homemaker	18	4.8
Total	**375**	**100**
Marital Status	**Frequency**	**Percentage**
Single (Mother)	48	12.8
Married	247	65.9
Divorced	35	9.3
Widow	45	12.0
Total	**375**	**100**
Number of children	**Frequency**	**Percentage**
1	40	10.7
2	99	26.4
3	86	22.9
4	61	16.3
Other (Specify)	89	23.7
Total	**375**	**100**

Local Government Area to distribute the questionnaires and gather data to be used for interpretation of the study result. The questionnaire was collected back from them after filling. The data got from the respondents were carefully examined and analysed. In analysing data collected from the bio-data, the researcher used summary statistics involving frequency tables showing frequencies and percentages which was followed by detailed interpretation. In answering the research question, descriptive

ANALYSIS OF DATA

Socio-Demographic Characteristics of the respondents

Table 1 revealed the demographic data of the respondents. Data on the age of the respondents revealed that majority of the respondents 201 (53.6%) were within the age range of 21 – 30 year. This is followed by within the age range of 31 – 40 years 108 (28.8%). 35 (9.3%) of the respondents are within the age range of 41 – 50 while 31 (8.3%) of the respondents were below 20 years. None of the respondents is above 50 years. Table 1 shows that majority of the respondents 211 (56.3%) were O Level holders followed by 96 (25.6%) respondents who were degree holders. 36 (9.6%) were FSCL holders while 36 (9.6%) had no education. Analysis of the occupation of the respondents revealed that majority of the respondents 135 (36%) were self-employed. This is followed by 97 (25.9%) of the respondents who were employed (part-time). 75 (20%) of the respondents were full time employed while 50 (13.3%) and 18 (4.8%) were unemployed and homemakers respectively. Similarly, analysis of the marital status of the respondents revealed that majority of the respondents 247 (56.9%) were married. This is followed by 48 (12.8%) of the respondents who were single mothers. 45 (12.0%) and 35 (9.3%) of the

Table 2. Impact of poverty on the abilities of families to afford a balanced diet for their children

Do you think poverty can predispose children to malnutrition	**Frequency**	**Percentage**
Yes	365	97.3
No	10	2.7
Total	**375**	**100**
To what extent do you think poverty can predispose children to malnutrition	**Frequency**	**Percentage**
Very High Extent	200	53.3
High Extent	114	30.4
Low Extent	39	10.4
Very Low extent	22	5.9
Total	**375**	**100**
How do you think poverty can predispose children to malnutrition? *Poverty can lead to*		
lack of access to nutritious food	**Frequency**	**Percentage**
Yes	326	86.9
No	49	13.1
Total	**375**	**100**
lack of access to healthcare	**Frequency**	**Percentage**
Yes	321	85.6
No	54	14.4
Total	**375**	**100**
Lack of knowledge about nutrition and health	**Frequency**	**Percentage**
Yes	245	65.3
No	130	34.7
Total	**375**	**100**
Affect the physical and social environment	**Frequency**	**Percentage**
Yes	300	80
No	75	20
Total	**375**	**100**
Increase access to nutritious food	**Frequency**	**Percentage**
Yes	10	2.7
No	365	97.3
Total	**375**	**100**
Increase access to healthcare	**Frequency**	**Percentage**
Yes	20	5.3
No	355	94.7
Total	**375**	**100**
Increase knowledge about nutrition and health	**Frequency**	**Percentage**
Yes	28	7.5
No	347	92.5
Total	**375**	**100**

respondents are widows and divorcees respectively. Finally, table 1 revealed that majority of the respondents 99 (26.4%) had 2 children attending primary school. This is followed by 89 (23.7%) respondents who had 5 children and above attending primary schools. 86 (22.9%) respondents had 3 children attending primary schools while 61 (16.3%) and 40 (10.7%) of the respondents respectively had 4 and 1 child attending primary schools.

Research Question One: What is the impact of poverty on the abilities of families to afford a balanced diet for their children?

Table 2 revealed the data on the responses of respondents on the impact of poverty on the abilities of families to afford a balanced diet for their children in Okigwe L.G.A of Imo State. Data from the table revealed that 365 (97.3%) of the respondents agree that poverty can predispose children to malnutrition while 10 (2.7%) disagreed. Similarly, analysis of the response of the respondents on the extent poverty can predispose children to malnutrition revealed that 200 (53.3%) of the respondents opined that poverty can predispose children to malnutrition to a very high extent. 114 (30.4%) agree to a high extent while 39 (10.4%) and 22 (5.9%) opined that poverty can predispose children to malnutrition to a to a low and very low extent respectively. Additionally,

analysis of the responses of the respondents on the specific areas poverty can predisposed children to malnutrition revealed that 326 (86.9%) opined that poverty can lead to lack of access to nutritious food while 49 (13.1%) of the respondents disagreed. 321 (85.6%) opined that poverty can lead to lack of access to healthcare while 54 (14.4%) disagreed. Similarly, 245 (65.3%) respondents agreed that poverty can lead to lack of knowledge about nutrition and health while 130 (34.7%) of the respondents disagreed. On the same vein, 300 (80%) of the respondents agreed that poverty can affect the physical and social environment while 75 (20%) of the respondents disagreed. Additionally, when asked if poverty can lead to increase access to nutritious food 365 (97.3%) of the respondents said 'No' while 10 (2.7%) of the respondents said 'Yes'. Also when asked if poverty can lead to increase access to healthcare majority of the respondents 355 (94.7%) said 'No' while 20 (5.3%) of the respondents said 'Yes'. Finally, the respondents where asked if poverty can increase knowledge about nutrition and health 347 (92.5%) of the respondents said 'No" while 28 (7.5%) of the respondents said 'Yes'. However, a thematic analysis of the responses of the respondents on other ways poverty can predispose children to malnutrition indicates that many of the respondents agreed that wrong decisions about nutrition, wrong choices of food and inability to eat balance diet can predisposed children to malnutrition and these can be caused by poverty. The implication of the above analysis is that poverty has a negative impact on abilities of families to afford a balanced diet for their children which in turn, predisposes children to malnutrition.

Research Question Two: What are the specific food preferences among children that contribute to malnutrition?

Table 3 revealed the respondents' opinions on specific food preference among children that contribute to malnutrition. Analysis of the responses from the respondents revealed that when the respondents were asked if there were specific food preference among children that contribute to malnutrition 345 (92.0%) of the respondent said 'Yes' while 30 (8.0%) of the respondents said no. The table also revealed the analysis of the respondents responses on how some food preferences are likely going to contribute to malnutrition among children 148 (39.4%) of the respondents ticked very likely, 145 (38.7%) of the respondents said somewhat likely, 47 (12.5%) of the respondents ticked somewhat unlikely, 25 (6.7%) of the respondent ticked very unlikely while 10 (2.7%) of the respondents ticked neither likely nor unlikely. When asked about food preferences that can contribute to malnutrition among children, 300 (80%) of the respondents opined that preference for sugary food can contribute to malnutrition among children while 75(20%) disagreed. 285 (76%) of the respondents opined that preference for high fat foods can contribute to malnutrition among children while 90 (24%) disagreed. 305 (81.3%) of the respondents opined that preference for highly processed foods can contribute to malnutrition among children while 70 (18.7%) disagreed. 297 (79.2%) of the respondents opined that preference for sugary drinks can contribute to malnutrition among children while 78 (20.8%) disagreed. 325 (86.7%) of the respondents opined that preference for junk foods can contribute to malnutrition among children while 50 (13.3%) disagreed. Finally, 275 (73.3%) of the respondents opined that preference for foods that are high in salt or fat can contribute to malnutrition among children while 100 (26.7%) disagreed. This implies that there are specific food preference among children that can contribute to malnutrition in Okigwe Local Government Area of Imo State.

Research Question Three: What are the cultural practices and beliefs that affect child feeding and nutrition in Okigwe?

Table 4 revealed the data on the responses of respondents on cultural practices and beliefs that affect child feeding and nutrition in OkigweL.G.A of Imo State. Data from the table revealed that 300 (80%) of the respondents agree that there are cultural practices and beliefs that can predispose children to malnutrition while 75 (20 %) disagreed. Similarly, analysis of the response of the respondents on the extent certain cultural practices and belief can predispose children to malnutrition revealed that 200 (53.3%) of the respondents opined that certain cultural practices and belief can predispose children to malnutrition to a very high extent. 114 (30.4%) agree to a high extent while 39 (10.4%) and 22 (5.9%) opined that certain cultural practices and belief can predispose children to malnutrition to a to a low and very low extent respectively. Additionally, analysis of the responses of the respondents on the specific cultural practices and belief that can predispose children to malnutrition include revealed that belief that children should be feed with certain types of food 325 (86.7%), forbidding children on eating during certain times of the day 297 (79.2%), belief that children should only eat certain amount of food 305 (81.3%), belief that children should not eat certain types of food like eggs 326 (86.9%) and belief of seeing certain food as unclean or impure 240 (64%) are some of the cultural practices and beliefs that can that affect child feeding and nutrition in Okigwe.

Research Question Four: What is the correlation between educational levels of parents and their ability to make informed nutritional decision for their children

Data on table 5 revealed the analysis of the respon-

Table 3. Frequencies and Percentages of respondents on specific food preference among children that contribute to malnutrition

Are there specific food preference that contributes to malnutrition among children?	**Frequency**	**Percentage**
Yes	345	92.0
No	30	8.0
Total	**375**	**100**
How likely do you think it is that certain food preference among children can contribute to malnutrition	**Frequency**	**Percentage**
Very unlikely	25	6.7
Somewhat unlikely	47	12.5
Neither likely nor unlikely	10	2.7
Somewhat likely	145	38.7
Very likely	148	39.4
Total	**375**	**100**
The following food preference can contribute to malnutrition among children		
Preference for sugary foods	**Frequency**	**Percentage**
Agree	300	80
Disagree	75	20
Total	**375**	**100**
Preference for high fat foods	**Frequency**	**Percentage**
Agree	285	76
Disagree	90	24
Total	**375**	**100**
Preference for highly processed foods	**Frequency**	**Percentage**
Agree	305	81.3
Disagree	70	18.7
Total	**375**	**100**
Preference for sugary drinks	**Frequency**	**Percentage**
Agree	297	79.2
Disagree	78	20.8
Total	**375**	**100**
Preference for junk foods	**Frequency**	**Percentage**
Agree	325	86.7
Disagree	50	13.3
Total	**375**	**100**
Preference for foods that are high in salt or fat	**Frequency**	**Percentage**
Agree	275	73.3
Disagree	100	26.7
Total	**375**	**100**

Table 4. Frequencies and Percentages of respondents on the cultural practices and beliefs that affect child feeding and nutrition in Okigwe

Are there cultural practices and beliefs that can predispose children to malnutrition?	**Frequency**	**Percentage**
Yes	300	80
No	75	20
Total	**375**	**100**
To what extent do you think certain cultural practices and belief can predispose children to malnutrition?	**Frequency**	**Percentage**
Very High Extent	200	53.3
High Extent	114	30.4
Low Extent	39	10.4
Very Low extent	22	5.9
Total	**375**	**100**
Some of the cultural practices and belief that can predispose children to malnutrition include		
belief that children should be feed with certain types of food	**Frequency**	**Percentage**

Table 4. Continue

Agree	325	86.7
Disagree	50	13.3
Total	**375**	**100**
Forbidding children on eating during certain times of the day	**Frequency**	**Percentage**
Agree	297	79.2
Disagree	78	20.8
Total	**375**	**100**
belief that children should only eat certain amount of food	**Frequency**	**Percentage**
Agree	305	81.3
Disagree	70	18.7
Total	**375**	**100**
belief that children should not eat certain types of food like eggs	**Frequency**	**Percentage**
Agree	326	86.9
Disagree	49	13.1
Total	**375**	**100**
belief of seeing certain food as unclean or impure	**Frequency**	**Percentage**
Agree	240	64
Disagree	135	36
Total	**375**	**100**

Table 5. Frequencies and Percentages of respondents on correlation between educational levels of parents and their ability to make informed nutritional decision for their children

Is there any correlation between educational level of parents and their ability to make informed nutritional decision	**Frequency**	**Percentage**
Yes	300	80
No	75	20
Total	**375**	**100**
What is the correlation between educational level of parents and their ability to make informed nutritional decision?	**Frequency**	**Percentage**
Positive Correlations	309	82.4
Negative Correlations	66	17.6
Total	**375**	**100**
Parents with high level of education are more likely to have knowledge about nutrition	**Frequency**	**Percentage**
Agree	321	85.6
Disagree	54	14.4
Total	**375**	**100**
Parents with high level of education are more likely to have information about healthy eating habits	**Frequency**	**Percentage**
Agree	319	85.1
Disagree	70	14.9
Total	**375**	**100**
Parents' educational background will expose them to making certain nutritional decisions and choices	**Frequency**	**Percentage**
Agree	336	89.6
Disagree	39	10.4
Total	**375**	**100**

dent's responses on the correlation between educational levels of parents and their ability to make informed nutritional decision for their children. Analysis from the responses of the respondents revealed that 300 (80%) of the respondents agreed that there is a strong correlation between educational level of parents and their ability to make informed nutritional decision while 75 (20%) opined that there is no correlation. Additionally, table 5 revealed that 309 (82.4%) of the respondents are of the opinion that there is a strong positive correlation between educational level of parents and their ability to make informed nutritional decision while 54 (14.4%) opined that

there is no correlation. Similarly, 321 (85%) respondents agreed that Parents with high level of education are more likely to have knowledge about nutrition while 54 (14.4%) disagreed. Additionally, 319 (85.1%) respondents agreed that Parents with high level of education are more likely to have information about healthy eating habits while 70 (14.9%) disagreed. Finally, 336 (89.6%) of the respondent held that Parents' educational background will expose them to making certain nutritional decisions and choices, 39 (10.4%) of the respondents disagreed.

DISCUSSION OF FINDINGS

Findings on the socio-demographic characteristics of the study respondents are presented in table 1. Majority of the respondents 201 (53.6%) were within the age range of 21 – 30 year. Additionally, the table further revealed that majority of the respondents 211 (56.3%) were O Level holders followed by 96 (25.6%) respondents who were degree holders. Analysis of the occupation of the respondents revealed that majority of the respondents 135 (36%) were self-employed. This is followed by 97 (25.9%) of the respondents who were employed (part-time). 75 (20%) of the respondents were full time employed while 50 (13.3%) and 18 (4.8%) were unemployed and homemakers respectively. Similarly, analysis of the marital status of the respondents revealed that majority of the respondents 247 (56.9%) were married. This is followed by 48 (12.8%) of the respondents who were single mothers. 45 (12.0%) and 35 (9.3%) of the respondents are widows and divorcees respectively. Finally, table 1 revealed that majority of the respondents 99 (26.4%) had 2 children attending primary school. This is followed by 89 (23.7%) respondents who had 5 children and above attending primary schools. 86 (22.9%) respondents had 3 children attending primary schools while 61 (16.3%) and 40 (10.7%) of the respondents respectively had 4 and 1 child attending primary schools. This implied that majority of the study participants were well educated and knowledge in the study areas and therefore can exercise good judgment and understanding regarding the items on the questionnaire. It further suggests that their response to the questions posed in the study were based on a good understanding.

Further finding revealed the data on the responses of respondents on the impact of poverty on the abilities of families to afford a balanced diet for their children in Okigwe L.G.A of Imo State. Data from the table revealed that 365 (97.3%) of the respondents agree that poverty can predispose children to malnutrition. Similarly, the table revealed that majority of the respondents 314 (83.7%) opined that poverty can predispose children to malnutrition. Analysis of the responses of the respondents on the specific areas poverty can predisposed children to malnutrition revealed that opined that poverty can lead to lack of access to nutritious food 326 (86.9%), lack of access to healthcare 321 (85.6%), lack of knowledge about nutrition and health 245 (65.3%) and poverty can affect the physical and social environment.

However, a thematic analysis of the responses of the respondents on other ways poverty can predispose children to malnutrition indicates that many of the respondents agreed that wrong decisions about nutrition, wrong choices of food and inability to eat balance diet can predisposed children to malnutrition and these can be caused by poverty. The implication of the above analysis is that poverty has a negative impact on abilities of families to afford a balanced diet for their children which in turn, predisposes children to malnutrition. This validates the findings of World Bank (2018), on the causes and consequences of child malnutrition: a framework for analysis and action. The study also found that malnutrition has serious long-term consequences, including poor cognitive development, reduced physical growth, higher risk of chronic diseases, and higher mortality rates. However, the study also found that interventions to prevent and treat child malnutrition are both effective and cost-effective.

Findings also revealed there were specific food preference among children that contribute to malnutrition 345 (92.0%). The table also revealed that food preferences are very likely 148 (39.4%), somewhat likely 145 (38.7%), somewhat unlikely 47 (12.5%), very unlikely 25 (6.7%), and neither likely nor unlikely 10 (2.7%) to contribute to malnutrition among children. The table further found that Specific food preferences that can contribute to malnutrition among children include, preference for sugary food 300 (80%) preference for high fat foods 285 (76%), preference for highly processed foods 305 (81.3%), preference for sugary drinks 297 (79.2%), preference for junk foods 325 (86.7%) and that preference for foods that are high in salt or fat 275 (73.3%) are the specific food preference that can contribute to malnutrition among children. This implies that there are specific food preferences among children that can contribute to malnutrition in Okigwe Local Government Area of Imo State. This validates the findings of Lawal (2019) on food preferences and malnutrition among children of 1 – 10 years in Kachia L.G.A of Kaduna State which revealed children who have more of preference for sweet foods, like candy or soda are more likely to have a higher risk of malnutrition. This is because according to the study those foods are usually high in calories but low in nutrients. The study also revealed that other students who have limited food repertoire are also more likely to have malnutrition.

More findings revealed the data on the responses of respondents on cultural practices and beliefs that affect child feeding and nutrition in Okigwe L.G.A of Imo State. Data from the table revealed that 300 (80%) of the respondents agree that there are cultural practices and

beliefs that can predispose children to malnutrition. Similarly, the table revealed that 200 (53.3%) and 114 (30.4%) of the respondents opined that certain cultural practices and belief can predispose children to malnutrition to a very high extent and high extent respectively. Additionally, analysis of the responses of the respondents on the specific cultural practices and belief that can predispose children to malnutrition revealed that belief that children should be feed with certain types of food 325 (86.7%), forbidding children on eating during certain times of the day 297 (79.2%), belief that children should only eat certain amount of food 305 (81.3%), belief that children should not eat certain types of food like eggs 326 (86.9%) and belief of seeing certain food as unclean or impure 240 (64%) are some of the cultural practices and beliefs that can that affect child feeding and nutrition in Okigwe. This collaborates that findings of Kwame (2018) on the influence of food taboos and cultural beliefs on child feeding practices in Ghana and the Relationship to child nutritional status which revealed that cultural beliefs about food taboos, like belief that certain foods are not suitable for children, can lead to nutritional deficiencies.

Data on table 5 revealed that 300 (80%) of the respondents agreed that there is a strong correlation between educational level of parents and their ability to make informed nutritional decision. The study a strong positive correlation 309 (82.4%) between educational level of parents and their ability to make informed. Similarly, 321 (85%) respondents agreed that Parents with high level of education are more likely to have knowledge about nutrition. Additionally, 319 (85.1%) respondents agreed that Parents with high level of education are more likely to have information about healthy eating habits. Finally, 336 (89.6%) of the respondent held that Parents' educational background will expose them to making certain nutritional decisions and choices. This is in agreement with the findings of World Food Programme and World Health Organization (2019) on the cost of hunger in Southern Africa. The study also found that child malnutrition has a significant impact on long-term outcomes, including lower levels of education and lower incomes in adulthood. This study also validates the findings of Espino, Buhion, Mejica, and Salut, (2018), on Mothers' Awareness on Prevention malnutrition among children aged 0-5 years old in a rural municipality in the Philippines. The study showed that the majority of the mothers had a low level of awareness on malnutrition prevention. The study also found that factors such as educational attainment, income, number of children, and knowledge of nutritional status were significantly associated with mothers' awareness of malnutrition prevention.

CONCLUSION

Based on the findings, it has been established that the socio-demography of the respondents include gender, age, education, occupation, marital status, number of children. More still majority of the respondents agreed that poverty has a strong negative impact on abilities of families to afford a balanced diet for their children. The study further concludes that preference for sugary food, high fat foods, highly processed foods, sugary drinks, junk foods and foods that are high in salt or fat are the specific food preference that can contribute to malnutrition among children. Additionally, the study found that cultural practices and beliefs can affect child feeding and nutrition in Okigwe. Such cultural beliefs and practices include; belief that children should be feed with certain types of food 325, forbidding children on eating during certain times of the day, belief that children should only eat certain amount of food, belief that children should not eat certain types of food like eggs and belief of seeing certain food as unclean or impure. Finally, the study concluded that there is a strong positive correlation between educational levels of parents and their ability to make informed nutritional decision for their children.

RECOMMENDATIONS

The following recommendations were made based on the findings of the study:

1. Governments should strengthen health systems to ensure that children have access to high-quality health care, including nutrition services. It is also important for the Governments to invest in social protection programs, such as cash transfers and food subsidies, to support poor and vulnerable families.
2. Governments in all parts of Nigeria especially in Okigwe L.G.A should prioritize reducing poverty and hunger, as this would have a significant impact on health and economic outcomes. It is also important to enlighten parents on those cultural belief and practices that are capable of exposes children to malnutrition so that they may put a stop to those practices especially in areas where children are affected by those cultural beliefs and practices
3. Investing in early childhood nutrition programs, would have a long-term impact on economic productivity. More still, investing in education, would also have a long-term impact on economic productivity. Parents should also ensure that children eat what their bodies requires and not those food that they preferred to eat. It is also important for health teachers especially those that teach the mothers during antenatal and those that teach the children in school to emphasize the importance of nutritious diets
4. There should be increasing health education campaigns on malnutrition prevention, providing nutrition information in a format that is easy to understand, and providing more health services in the community.

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