



Assessment of the Causes and Prevention of Malnutrition among Primary School Children in Bade LGA of Yobe State, Nigeria

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ABSTRACT

The study was designed to assess the causes and prevention of malnutrition among primary school Children in Bade LGA of Yobe State, Nigeria. Four research objectives and four research questions were raised to guide the conduct of the study. The study adopted the survey research design. The population of the study comprises of all the teachers and pupils in primary schools in Bade LGA of Yobe State. Due to the large number of teachers and pupils in primary schools in Bade LGA of Yobe State 10 primary schools, where a total sample of 200 respondents were selected. The 200 respondents comprises of 100 teachers and 100 pupils. The simple random sampling (SRS) was adopted for the selection of the sampled population. The researchers used primary data in the study. The primary data was obtained through the use of a 30 item questionnaire designed by the researchers. The data collected for the study were analyzed using mean score and standard deviation to answer the research questions. From the findings of the study the paper conclude that malnutrition can be caused by various factors. The causes of malnutrition include: Inadequate food intake, improper food practices, poor caregiving and parenting, infectious comorbidities, food insecurity, inadequate economic resources at the individual, household, and community levels, limited or poor access to education and poor hygienic environment. The findings also shows that malnutrition can be prevented through Breastfeeding, education about nutrition for, mothers and other caretakers, Introducing education about nutrition in schools, Provision of economic resources at the individual, household, and community levels, Provision of healthy, balanced diet to pupils through National School Feeding Programme and Provision of Improved health care system. Based on the above conclusion, the paper recommends that: there is the need for Nutritional programmes of the country to be expanded and Primary school pupils should be targeted with educational programmes in order to reduce high rate of malnutrition.

KEY WORDS: Causes, Prevention, Malnutrition and Primary School Children

Introduction

Nutrition is linked to Sustainable Development Goals (SDG) (National Population Commission, 2014), and it is very vital in the development of an individual in particular and the nation at large. In another vein, malnutrition remains a major problem and is responsible for child mortality especially in third world countries (UNICEF/WHO/World Bank, 2012 & WHO, 2013).

Malnutrition is the consumption of dietary nutrients either insufficiently or exclusively (Etim et al., 2017). Malnutrition is a severe medical condition that develops when an individual does not get enough food or does not get the right type of food. It is important to note here that malnutrition is not about not having food because even if people have food to eat, they can still develop malnutrition if the food is not a balanced diet (World Food Program, 2015).

Researches have shown that, out of the 162 million children who were stunted, 36% of them resided in Africa while 56% were found in Asia (UNICEF/WHO/World Bank, 2012). In Nigeria, the pattern and severity of childhood malnutrition has steadily increased from 11% in 2003 to 18% in 2013 for wasting; 24% in 2003 to 29% in 2013 for underweight, although there was a decline from 42% in 2003 to 37% in 2013 for children who were stunted(National Population Commission, 2013).

In Nigeria, malnutrition is seen as a national emergency this is because in Nigeria malnutrition is widespread, especially in the rural areas (Nnunukwe, 2018). This is because of shortage of food and nutrient supply. Malnutrition accounts for 49% school absenteeism in 42% of Nigerian children (Yanusa et al., 2012). The above assertions are indications that lot of studies on malnutrition as it affects the children of Sub-Saharan Africa has been conducted. It is against this backdrop that this paper is designed to assess the causes and prevention of malnutrition among primary school children in Bade LGA of Yobe State, Nigeria

Purpose of the Study

The main purpose of the study is to assess the causes and prevention of malnutrition among primary school children in Bade LGA of Yobe State, Nigeria. Specifically, the study is designed to:

1. Identify the causes of malnutrition among primary school children
2. Identify the signs and symptoms of malnutrition among primary school children
3. Examine the impact of malnutrition among primary school children
4. Assess the prevention of malnutrition among primary school children

Research Questions

The following research questions were raised to guide the conduct of the study

1. What are the causes of malnutrition among primary school children?
5. What are the signs and symptoms of malnutrition among primary school children?
2. What are the impact of malnutrition among primary school children?
3. What are the prevention of malnutrition among primary school children?

Literature Review

Concept of Malnutrition

Malnutrition according to Frye (2013), is a pandemic affecting people throughout the world with vulnerable populations, such as children disproportionately suffer its effects. Malnutrition is seen as a health condition associated with eating food that contains either insufficient or too many calories, carbohydrates, vitamins, proteins, or minerals (Davis, Oaks, & Engle-Stone, 2020; Zhang & Ma, 2018).

In another vein, Kats & Lambros, (2011) see malnutrition as a medical condition that is caused by improper or insufficient diet in the body. Malnutrition is defined as a state of under- or over nutrition, characterized by deficiency or an excess of essential nutrients (Abate & Belachew, 2019). Malnutrition is the cellular imbalance between the supply of nutrients and energy and the body's demand for them to ensure growth, maintenance, and specific conditions (Ebuehi, 2012, WHO, 2013).

Causes of malnutrition among primary school children

Clark et al. (2020) and Drammeh, Hamid, and Rohana (2019) stated that malnutrition among children is a result of a complex interaction of availability, accessibility, and utilization of food and healthcare services. This means that malnutrition is caused by many factors which include: inadequate food intake, poor caregiving and parenting, improper food practices, and infectious comorbidities, food insecurity and inadequate economic resources, limited or poor access to education, healthcare services, infrastructure, and a poor hygienic environment. On his part, Etim (2016) reported that many people, especially the poorer populations, are malnourished because of scarcity of food in markets, poor family income, and fluctuations in food prices.

Other causes according to Aderale (2015) include poverty which is seen in the lack of basic human needs such as nutritious food, good nutrients, clothing, and health services. Children from poor families are likely to be affected by malnutrition due to inadequate diets or nutrients. According to Saunders (2010), other factors that play a vital role in the cause of malnutrition are: illnesses that cause increased nutrient requirements, illnesses that cause increased nutrient loss, poor nutrient absorption, or a combination of these factors and ignorance (Nnukwe, 2018).

Signs and symptoms of malnutrition

According to Morely (2020), reduced ability to perform normal tasks, reduced physical performance, difficulty preparing meals or difficulty performing other daily activities, displaying altered mood states, wounds heal more slowly, skin tears more easily, muscle tissue begins to waste away, bones start to protrude, eyes and cheeks appear sunken, skin and hair are dry and brittle, feeling cold, diarrhea, and a weakened immune system might manifest in infections other symptoms include the major signs and symptoms of malnutrition are: general loss of appetite, loss of muscle, unexplained or unintentional weight loss, fatigue, tiredness, loss of energy, confusion and poor concentration,

Consequences of Malnutrition in Primary Schools

UNICEF (2013) reported that malnutrition among children is a substantial public health problem that requires a systematic approach to promote behavior change and more knowledge and support. According to Wali, Agho, and Renzaho (2019), malnutrition can lead to morbidity, mortality, and disability, as well as impaired cognitive and physical development and an increased risk of concurrent infections. UNICEF (2015) discusses both the long- and short-term effects of malnutrition and revealed that all of the effects of malnutrition lead to increased mortality and morbidity. Other consequences are

anemia, inadequate growth, osteoporosis, decreased cognitive ability, and a lack of zinc, iron, and other vital minerals and vitamins. One major effect is that children with malnutrition become more susceptible to diseases such as diarrhea, malaria, and other infections caused by bacteria or viruses.

Strategies for Preventing Malnutrition

Prevention of malnutrition is a global health challenge (World Health Organization (WHO), 2022). Some of the strategies adopted for the prevention of malnutrition include:

Breastfeeding: Breastfeeding has an extraordinary range of benefits and is the most effective way to provide proper nutrition for a baby which help in tackling malnutrition cases. This assertion is true because breast milk provides all the essential nutrients, vitamins, and minerals a baby needs for growth and normal development during the first six months. The milk also provides antibodies from the mother that help the baby combat diseases (UNICEF, 2014). In addition to the above, breastfeeding also helps to lower the risk of developing different medical conditions later in life, such as high blood pressure, diabetes, childhood asthma, and high cholesterol (UNICEF, 2014).

Provision of an Improved Health Care System: according to Vikaspedia (2023) a good healthcare system that provides immunization, oral rehydration, periodic deworming, early diagnosis, and proper treatment of common illnesses can go a long way in preventing malnutrition in society.

Education for mothers and other caregivers: According to UNICEF (2012), education of mothers and other caregivers is one of the biggest strategy for improving nutritional security and reducing malnutrition. The education for mothers and other caregivers needs to cover how to provide the children with enough nutrients and how this will be performed with the families' resources in mind (UNICEF, 2012).

Introducing education about nutrition in schools: Introducing education about nutrition in schools is also of high value since schools have access to a large number of children. Schools can reach out to children at a young, critical age where they can be educated about how to eat healthy and resist falling into unhealthy eating habits (Meko, Slabber-Stretch, Walsh, & Kruger, 2015).

Research Methodology

The study adopted the survey research design, the survey research design was adopted because of the fact that all categories of information needed for descriptive and inferential use in research can be obtain through the use of survey research design.

The population of the study comprises of all the teachers and pupils in primary schools in Bade LGA of Yobe State. Due to the large number of teachers and pupils in primary schools in Bade LGA of Yobe State 10 primary schools, where a total sample of 200 respondents were selected. The 200 respondents comprises of 100 teachers and 100 pupils. The simple random sampling (SRS) was adopted for the selection of the sampled population.

The researchers used primary data in the study. The primary data was obtained through the use of questionnaire designed by the researchers. The instrument is a 30 items questionnaire to elicit responses from the respondents on the perceived causes and prevention of malnutrition among primary school children in Bade LGA of Yobe State, Nigeria.

The data collected for the study were analyzed using mean score and standard deviation to answer the research questions.

Result and Discussion

Answering the Research Questions

Research Question One: What are the causes of malnutrition among primary school children?

Figure 1: the causes of malnutrition among primary school children



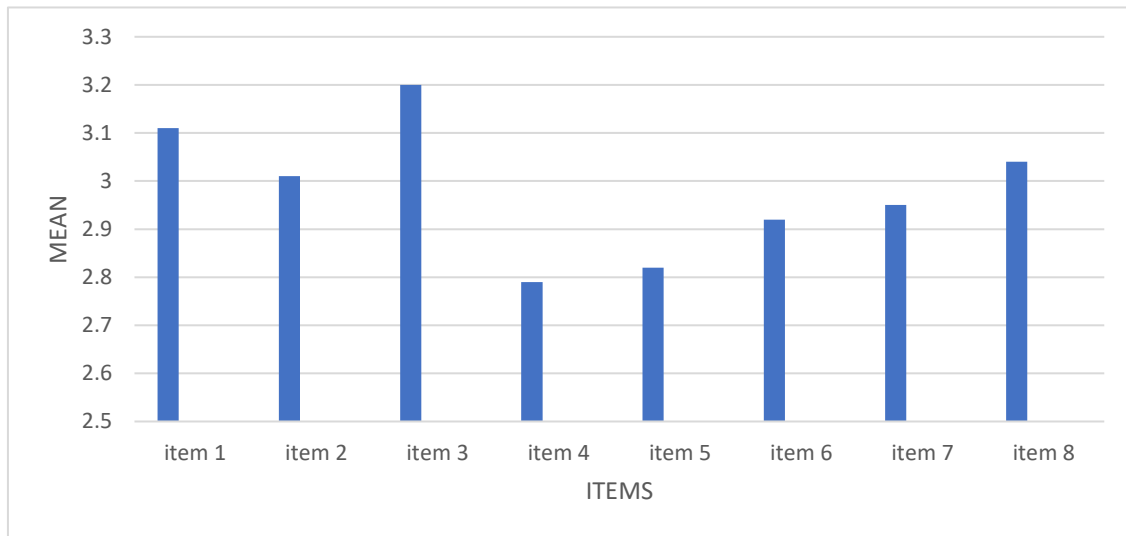
Source: Research Survey November, 2023

From the analysis in figure one, it is clear that there are various causes of malnutrition among primary school children, these causes include: Inadequate food intake, improper food practices, poor caregiving and parenting, infectious comorbidities, food insecurity, inadequate economic resources at the individual, household, and community levels, limited or poor access to education and poor hygienic environment. This assertion is supported with calculated mean scores of 2.74, 3.01, 3.09, 3.12, 3.11, 3.03, 2.59 and 2.78 respectively.

Research Question Two: what are the signs and symptoms of malnutrition among primary school children?

Figure 2: the signs and symptoms of malnutrition among primary school children

Source: Research Survey November, 2023

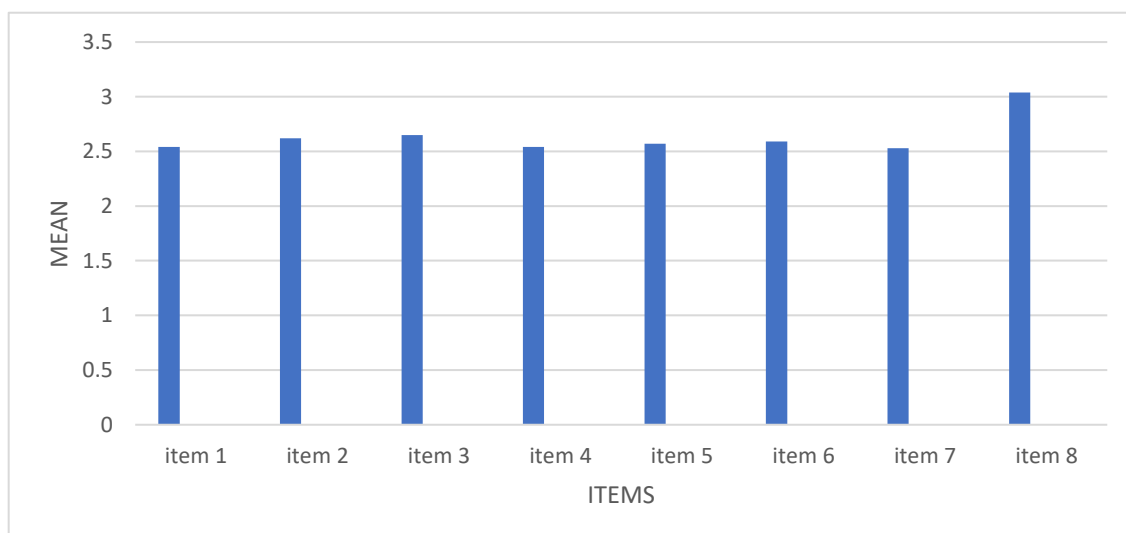


Source: Research Survey November, 2023

From the analysis in figure 2 it is clear that the signs and symptoms of malnutrition among primary school children according to the respondents are: General loss of appetite, losing muscle, unexplained or unintentional weight loss, fatigue, tiredness, loss of energy, reduced ability to perform normal tasks, Reduced physical performance, Displaying altered mood states and a weakened immune system, which might manifest in infections. This is supported with calculated mean scores of 3.11, 3.01, 3.20, 2.79, 2.82, 2.92, 2.95 and 3.04 respectively.

Research Question Three: What are the effects of malnutrition among primary school children?

Figure 3: are the effects of malnutrition among primary school children?



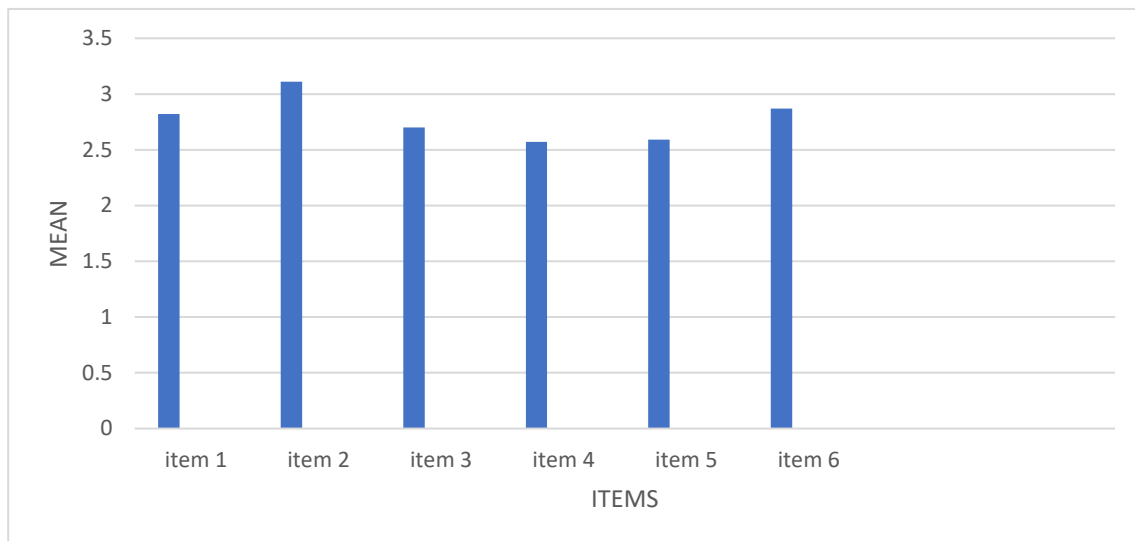
Source: Research Survey November, 2023

From the analysis in table three it is clear that the effects of malnutrition among primary school children are: Malnutrition can lead to increased mortality and morbidity, malnutrition can lead to anemia, malnutrition can lead to inadequate growth, malnutrition can lead to osteoporosis, malnutrition can lead to decreased cognitive ability, malnutrition can lead to susceptibility to diseases such as diarrhea, malaria etc. malnutrition can lead to impaired physical

development and malnutrition can lead to impaired cognitive development. This assertion is supported with calculated mean scores of 2.54, 2.62, 2.65, 2.54, 2.57, 2.59, 2.53 and 3.00 respectively.

Research Question four: What are the ways of preventing malnutrition among primary school children?

Figure 4: the ways of preventing malnutrition among primary school children



Source: Research Survey November, 2023

From the analysis in figure four above, it is clear that the various ways of preventing malnutrition among primary school children are: Breastfeeding has an extraordinary range of benefits and is the most effective way to provide proper nutrition for a baby, education about nutrition for, mothers and other caretakers, Introducing education about nutrition in schools, Provision of economic resources at the individual, household, and community levels, Provision of healthy, balanced diet to pupils through National School Feeding Programme and Provision of Improved health care system. This finding is supported with calculated mean scores of 2.82, 3.11, 2.70, 2.57, 2.95 and 2.87 respectively.

Discussion of Findings

The finding of the study revealed that there are various causes of malnutrition among primary school children, these causes include: Inadequate food intake, improper food practices, poor caregiving and parenting, infectious comorbidities, food insecurity, inadequate economic resources at the individual, household, and community levels, limited or poor access to education and poor hygienic environment. This finding agreed with the findings of Clark, et al. (2020) and Drammeh, Hamid and Rohana (2019) Aderole, (2015), Etim (2016) and Nnukwe, (2018)

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Conclusion and Recommendations

From the findings of the study the paper conclude that malnutrition can be caused by various factors. The causes of malnutrition include: Inadequate food intake, improper food practices, poor caregiving and parenting, infectious comorbidities, food insecurity, inadequate economic resources at the individual, household, and community levels, limited or poor access to education and poor hygienic environment. The findings also shows that malnutrition can be prevented through Breastfeeding, education about nutrition for, mothers and other caretakers, Introducing education about nutrition in schools, Provision of economic resources at the individual, household, and community levels, Provision of healthy, balanced diet to pupils through National School Feeding Programme and Provision of Improved health care system.

Based on the above conclusion, the paper recommends that:

1. There is the need for Nutritional programmes of the country to be expanded
2. Primary school pupils should be targeted with educational programmes in order to reduce high rate of malnutrition.
3. There is the need for appropriate counseling on nutritional
4. There is the need for Health educators to create awareness through seminars and workshops in the communities, schools and media on the need to always eat good meals and encourage people not to eat junks or stay hungry unnecessarily in order to prevent malnutrition from occurring and promote wellbeing.
5. There is the need for Health workers to periodically monitor primary schools eating habits.
6. There is the need to improve the school feeding programme
7. There is the need to provide job opportunities and even opportunities for individuals to be self-employed. This will help to raise the economic status of the family and their nutritional status.

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