

HEALTH AND NUTRITION IN EARLY CHILDHOOD EDUCATION: A GOOD BEGINNING

Obiweluzo, E. P. (Mrs.)
Department of Educational Foundations
University of Nigeria, Nsukka.
E-mail: enupee@yahoo.com
Phone No: +234-806-494-8019

Abstract

This study examined health and nutrition in early childhood education for a good beginning. A survey design was used for the study and three research questions guided the study. The sample for the study comprised eighty-four primary school teachers in Nsukka Education Authority. The instrument for data collection was questionnaire. Mean scores and standard deviations statistics were used for data analysis. Results revealed that health and nutrition were essential for children's good beginning in childhood education. In addition, the result showed that poverty, ignorance, among others were constraints to good health and nutrition. Recommendations were made based on the findings.

Introduction

Good Health and nutrition are essential components that make life worth living for every individual. They are the basic physiological needs for human beings to thrive. In early childhood period, they play essential role for children's healthy growth and development. Early childhood is an important phase of life. It carries a critical and sensitive impression of early years that lasts throughout life. Therefore, for pre-primary school children to live happily, enjoy this special phase of life, excel in education, and become future literate adult oriented citizens, adequate health care and nutritional provisions are imperative for a good beginning.

Health relates to the physical condition of both body and mind of a person, including the social and emotional well-being and not just the absence of disease or infirmity (WHO, 1986). Good health is the result of meeting the health, safety and nutritional needs of a child by taking good care of the child by parents or caregivers. Health is concomitant to life. It is of prime importance to every individual, more especially the pre-primary schoolchildren for a good beginning. Nutrition is a term used for science or study of food and how the body uses the constituents of food. Eating full range of nutrients that are found in variety of food produces a good fuel resource by providing the body with the energy needed for all its different functions and purposes. Healthy eating means getting the right overall balances, not banning or promoting specific food to enable the body to grow.

Health is wealth and is precious. Nutrition is equally important to enable the body function vigorously. Good nutrition in early childhood education paves the way for good health and optimal development. Alo (2010) states that good nutrition during a child's first years of life determines the health outcome. Exclusive breast-feeding for the first six months of life helps the child to build good immune system with appropriate complementary feeding from the age of six months. Subsequent adequate nutrition seals the growth and development of the children. It affects the ability to learn, communicate and improve general psychosocial development. Early nutrition in life determines the health, education and economic participation for the rest of adult life.

The health of every child is traced to the time of conception. Tremendous growth and development takes place in the fetus during pregnancy (Egbuonu, 2002). It is therefore, pertinent for mothers to receive good antenatal care. After birth, the child attains about half ($\frac{1}{2}$) his adult height at about 2 years. The tremendous growth and development depend mostly on the nutrition and health of the child. FGN/UNICEF cited in Maduewesi (2005) stated that, research has shown that, the last three months of pre-natal life and the first two years after birth are the most critical period of brain growth and development. This is because more than half of the adult brain weight is added at this time. This grows and develops very fast over the first few years of life, increasing to about two and half of adult weight by the end of the first year 75% by the age of 2 years and 90% by the age of 5 year. The brain, therefore, is virtually full grown by the age of five years. Thus, adequate health

care and nutritional provision are imperative at this early phase of life to avoid brain damage and other subsequent illnesses.

Health and nutrition complement each other. The two components are very essential in the early childhood years for a good beginning. Early childhood/pre-primary education is an education given to children in a formal educational institution prior to their entering primary school. This includes the crèche nursery and kindergarten. FRN (2004) noted that early years are precious and critical in an individual's life because it is the time the foundation for adult development is laid. That is the reason why it is necessary to provide the child with good health care and adequate nutrition in order for the child to grow and develop optimally. A good beginning in this study, imply providing all the necessities to good health and adequate nutrition for the child at the critical period or early years of life when the body is in great demand of them. This is for proper and adequate growth and development to take place in a child's life. It is a good beginning for growth and development without any hindrance by childhood illnesses or malnutrition. Such a child would grow and develop to his/her maximum potentials undisturbed. UNICEF (2002) noted that attention to early childhood is a critical aspect of anti-poverty strategies to break intergenerational cycles of chronic poor health and sub-optimal human development. It becomes critically important that greater care and attention be exercised in handling the young ones during this period. In response to this, Nigeria has developed a number of policies: - education, health, food and nutrition, all of which aimed at improving the status of young children

Policy Objectives

- (a) Provide care and support that will ensure the rights of the child to
 - (i) Good nutrition and health
 - (ii) Healthy and safe environment.
 - (iii) Raise awareness of HIV/AIDS and promote protective behaviour among children including OVCS.

Stakeholders Roles and Responsibilities Health

- (i) Providing for full immunization and micro nutrient supplementation
- (ii) Integrated management of childhood illnesses
- (iii) Development of health and nutrition components of IECD curriculum and standards.
- (iv) Promotion of save motherhood and care of the new born
- (v) Prevention of mother-to-child transmission of HIV/AIDS and care of HIV orphans.
- (vi) Making provision for early detection and management of children with disabilities

Source: National Policy for Integrated Early Childhood Development in Nigeria (2007), 11-14.

In line with the above National Minimum Standards for Early child Care Centres in Nigeria, the government gave a prescription for health and nutrition for early childhood education centre. These include the following;

The Requirement in Health

- (i) Weekly health inspection of the children, e.g. oral hygiene and physical inspection etc.
- (ii) Facilities for storing expressed breast milk and complementary feeding for 0-2 months.
- (iii) Monthly growth monitoring and promotion (with records)
- (iv) Standard First Aid Box (splint, bandages, cotton wool, antiseptic, scissors, methylated spirit, adhesives, liniment, analgesics, thermometer, powder, and petroleum jelly) and staff trained on their use.
- (v) Treatment of common ailment and appropriate referral.
- (vi) Provision of health and nutrition corner with education materials (poster, charts, models etc.)
- (vii) Evidence of monthly visit from the health worker (school health service units) for routine immunization, supplementation and other health services (and availability of such records in the centre)

- (viii) Adoption of appropriate behaviour regarding prevention and care of HIV/AIDs affected children
- (ix) Daily physical exercise regime/periods
- (x) Linkage with nearby health facility
- (xi) Regular de-worming (4-6 months)
- (xii) Establishment of ECCD parents clubs in the community
- (xiii) Provision of fire extinguishers/buckets of sand etc.

Health Material

- (i) Weighing scales
- (ii) Growth charts
- (iii) Heightometres
- (iv) Roller metre/infanto metre
- (v) Shakir arm trip/tape measure
- (vi) Road to health cards
- (vii) Measuring cups/jugs/bottles
- (viii) Measuring spoon (tea spoons)
- (ix) Salt and sugar (for regular use and ORS)
- (x) Clean water
- (xi) Provision of spare clothes
- (xii) IEC charts/posters/pictures
- (xiii) Hand towels and soap

The Requirements in Nutrition

- (i) Approved feeding arrangements (nutritionally adequate and hygienic)
- (ii) Exclusive breast feeding for 0-6 months old children
- (iii) Provision of food complements in addition to breast milk for 6 months-2years old children.
- (iv) Provision of good amount of micronutrients (especially vitamin A and Iron) in children's diet.

Nutrition Materials

- (i) Clean water
- (ii) Facilities for storing breast milk and complementary food for 0-2 year olds.
- (iii) Stove and cooking pots/bowls with covers.

Source: NERDC supported by UNICEF

The policy objectives, requirements and responsibilities regarding health and nutrition are realistic and tenable but the problem is that the government has not done much towards the achievement of these goals. This appears to be true looking at the issues for early childhood survival:

- (a) Persistent high infant and under-five mortality rates (especially in the north), diseases and acute respiratory infections
- (b) Decline in immunization coverage rates (in all parts of the country, but with rates among the lowest in the world in northern Nigeria), due to weak PHC system and very low rates of routine immunization, and the unsustainability of large, costly, donor-funded mobile campaigns
- (c) Lack of prevention against malaria, very low level of usage of Insecticide Treated Nets (ITNs); inadequate diagnosis and, treatment of malaria, including shortages of drugs and poor referral systems for complex cases.
- (d) High incidence of diarrhea disease, due partly to unsanitary environmental conditions and unsafe water supply; but significant improvement in treatment of diarrhea through ORS/RHS and increase fluids
- (e) Rising incidence of mother to child transmission of HIV/AIDS
- (f) Very low though rising rates of exclusive breastfeeding

- (g) High prevalence of stunting and wasting, in context of large-scale deepening poverty and household food insecurity
 - (h) High prevalence of Vitamin A deficiency, but opportunity to capitalize on recent legislation on food fortification with Vitamin A
 - (i) High prevalence of inherited sickle cell anemia and inadequate resources for treatment to alleviate its effects
 - (j) Weak primary health care system, with endemic drug shortages, lack of equipment, poor service, financial barriers to access from poorly designed cost recovery mechanisms, lack of effective community participation of real decentralization, weak referral linkage to secondary and tertiary care, many overlapping vertical programmes, weak information systems and planning, low levels of national funding and over dependence on donors.
- Source: Hodges (2001).

These culminated conditions of poor health and nutrition invariably affect the education of children in a number of ways. Children's health and nutrition have an impact on their access to school and school readiness. This may have knock-on effects for their educational achievement and attainment particularly where effects of diseases and poor nutrition of brain development persist as cognitive impairments or emotional problems throughout the school-age years in such a way that the disease leads to serious physical or mental disabilities. Such conditions typically affect children's educational opportunities to a greater extent in low-income countries than in high-income countries. This is not only because poorly-resourced schools lack the facilities to cater for the special needs of children with disabilities but also because of the stigma that can be attached to these children either from parents who do not think the child's education is worth investing in or from fellow schoolchildren and teachers who do not wish to have them in their schools (DFID in Jukes 2006).

Consequences of Nutritional Deficiencies in Early Childhood

Micronutrient deficiencies and their interactions with infections play a major role in the cause of disability by increasing the risk of measles and other serious childhood infections that can result in long-term disability (Jukes, 2006). More so, the author stated that there is substantial evidence that reduced breastfeeding, stunting, iron and iodine deficiencies are associated with long term deficits in cognition and school achievement suggesting that early childhood diarrhea infection can affect physical fitness in early school age year.

Common conditions of poor health and nutrition appear to have plagued early childhood school children with five communicable diseases, which are treatable and preventable (Hurlock, 1972). These are pneumonia, diarrhea, measles, malaria and HIV/AIDS. Diphtheria and pneumonia are the most serious illnesses at this age. Susceptibility to disease is very marked from three to six or eight years of age. Unless carefully segregated from other children, most boys and girls at this stage are subject to a series of quarantines for different childhood diseases, as mumps, chickenpox, whooping cough, scarlet fever, and diphtheria. Certain illnesses leave permanent physical effects, such as a damaged heart following rheumatic fever or damage to the brain from encephalitis. Prolonged illness affects the schoolchild's status in his class. The longer he remains ill and the more severe the illness is, the greater is the effect likely to have physical defects which affect school standing. For instance, defects that appear to have the most pronounced influence on the children's work in school were diseases such as tonsillitis, serious eye defects, and malnutrition (Jukes, 2006).

Nutritional deficiencies are major factors contributing to the high rates of morbidity, mortality and disability in Nigeria. Malnutrition is reported by the National Health Management Information System (NHMIS) as a direct cause of death in only 2 percent of infant and under-five mortality. It is also a contributory factor in a much higher proportion of mortality in these age groups. Malnutrition is a pathological condition brought about by inadequacy or over-consumption of one or more of the essential nutrients necessary for survival, growth and reproduction, as well as productivity at work. There are different types of malnutrition, of which the most important are the Protein-Energy Malnutrition (PEM) and deficiencies in critical micro-nutrients such as vitamin A, iron, iodine and Zinc, among others. (Hodges, 2001). Egbunu (2002) stated that, malnutrition affects about 50% of African children. The author opined that Africa has the world's worst basic statistics. Sub-Saharan

Africa is the home for the majority of the least developed and developing countries. The reasons according to the author are ignorance, poverty, financial misappropriation, wars and natural disasters.

Early childhood education is a fertile ground for teaching children health and nutrition appropriate to their level. The National Policy on Education specified the teaching of good habits, especially good health habits as one of the objectives of pre-primary education. Onibokun in Olubor (2002) explained that health habits include hygienic use of cups, how to use the toilet, how to dress properly, how to wash fruits before eating, how to wash hands after games and plays and after going to the toilet; how to report bruises and cuts for first aid treatment. Furthermore, they emphasized that:

Although parents do teach their children these health habits, it appears that the pre-school institution is in a better position to help the pre-schoolchild develop these health habits as a group in an environment where independence rather than dependence is encouraged. In other words, however careful the parents may be, they are more likely to err on the side of spoon-feeding their children than would be pre-school staff.

The Integrated Early Child Curriculum and Development included health and nutrition as part of the learning content for children. This include identification of parts of their body, how to use the toilet, how to wash the hands before eating snacks and after playing, among others. In nutrition, they are to learn the foods we eat: - egg, milk, fruit, and vegetable, among others. Children learn these things; but the actual problem is providing good health care and nutritional food for them.

Early childhood education is a neutral platform for providing good health care and adequate nutrition for children, especially the less privileged. Children from poor and illiterate parents will benefit by receiving proper health care and adequate nutrition. It is an avenue for reaching parents and other adults in the society. With the Integrated Early Child Care Curriculum and Development, parents, Caregivers, stakeholders and other adults are expected to be fully involved in the health care and nutrition of children. However, the problem of achieving this goal lies on the implementation. It is against this background that the researcher seeks to examine the health and nutrition of children in early childhood education for a good beginning.

Purpose of Study

Specifically the study seeks to:

1. Determine the importance of health and nutrition in early childhood education for a good beginning.
2. Identify the constraints to good health and adequate nutrition in early childhood education for a good beginning.
3. Determine the ways of enhancing health and nutrition in early childhood education for a good beginning.

Research Questions

The following research questions guided the study.

1. What is the importance of health and nutrition in early childhood education?
2. What are the constraints to good health and adequate nutrition in early childhood education?
3. What are the ways of enhancing health and nutrition in early childhood education?

Methods

The design of the study was a survey. The study aimed at examining health and nutrition in early childhood education for a good beginning. The area of the study is Nsukka Local Education Authority in Enugu state. It has forty-nine primary schools. The population for the study consisted of all the forty-nine (49) primary schools in the zone. Seven primary schools were selected out of a total of forty-nine primary schools through simple random sampling techniques. Eighty-four primary school teachers were randomly selected from the sampled schools.

The instrument for the study was a researcher-constructed questionnaire titled Health and Nutrition in early childhood education. Question (HANIECEQ). The instrument was made up of three sections. Section A – Elicited responses on importance of health and nutrition in early childhood education. Section B: sought information on the constraints to good health and nutrition in early childhood education while section C sought information on the ways of enhancing health and nutrition in early childhood education. The instrument was a four point rating scale of Strongly Agree (SA), Agree (A), Disagree (D) and Strongly Disagree (SD) with a corresponding value of 4, 3, 2 and 1, respectively. The instrument was face validated by two experts: one in Home Economics and another in Childhood Education of the Faculty of Education, University of Nigeria, Nsukka. The internal consistency of the instrument was obtained using Cronbach Alpha and an estimate value of 0.81, 0.77, and 0.76 were obtained for the three sections respectively. Mean score statistics and standard deviation were used for data analysis. A total mean score of 2.50 and above was used as cut-off point for agree while any mean score below 2.50 indicate disagree.

Results

The results of the study are presented in the tables below:

Research Question One

What is the importance of good health and nutrition in early childhood education?

Table I: Mean scores of teachers on the importance of good health and nutrition in early childhood education

S/N	Item statement	Mean \bar{X}	Standard Deviation	Decision
1	Good health and nutrition improve the nutritional status of young children, which in turn affects their social and emotional school readiness.	3.88	0.36	A
2	Adequate nutrition plays a key role in the health and development of young children	3.96	0.19	A
3	Children who are healthy and well fed are more likely to concentrate on schoolwork in the school.	3.66	0.55	A
4	Good nutrition during a child's first years of life determines the health outcome of the child.	3.52	0.50	A
5	Exclusive breast-feeding for the first six months of life helps the child to build good immune system.	3.52	0.50	A
6	Good health and adequate nutrition affects on the child's ability to learn, communicate and improve general psychosocial development.	3.79	0.41	A
7	Good health care and nutrition prevents infant and under-five mortality rates.	3.79	0.41	A
8	Full immunization and micro nutrient supplement prevent childhood illness and seals the growth and optimal development in children	3.50	0.50	A
9	Preventive nutritional supplementation improves cognitive development and educational achievement of preschoolers	3.40	0.49	A
10	Health and nutrition in early childhood improve all aspect of school readiness especially the motor development.	3.42	0.49	A

Data on table 1 indicates that the teachers identified item statement numbers 1-10 as important for good health and nutrition in early childhood education. This is seen in their mean scores, which were above 2.50, that is, the benchmark. The mean scores and standard deviation, range between 3.40 - 3.96 and 0.19 - 0.55, respectively.

Research Question Two

What are the constraints to good health and adequate nutrition in early childhood education?

Table 2: Mean scores of primary school teachers on the constraints to good health and nutrition in early childhood education

S/N	Item Statement	Mean \bar{X}	Standard Deviation	Decision
11	Poverty stricken children from indigent parents lack good health.	3.68	1.46	A
12	Illiterate parents are ill informed about children's basic health needs and adequate nutrition.	3.46	1.50	A
13	Ignorance can lead to poor health and malnutrition	3.54	0.50	A
14	Faulty eating habits may lead to malnutrition	3.47	0.50	A
15	Financial misappropriation of some government officials and parents (in the family) leads to non-provision of necessary health care facilities and service delivery.	3.51	0.50	A
16	Cultural attitudes of some ethnic groups hinder children from eating the necessary nutritional food (such as egg, snail, beans, among others) and expose them to poor health.	2.41	1.59	A
17	Some people's religion exposes children to dangerous health and poor feeding habits.	3.34	0.47	A
18	Natural disasters are an endemic hazard. Which hinder children from the affected areas from receiving better nutrition and good health care.	3.54	0.50	A

The data on table 2 above revealed that items 11-18 are constraints to good health and nutrition in early childhood education. The mean scores and standard deviation range between 3.34-3.68 and 0.46-0.50, respectively.

Research Question Three

What are the ways of enhancing health and nutrition in early childhood education?

Table 3: Mean scores of primary school teachers on the ways of enhancing good health and adequate nutrition for children in early childhood education

S/N	Item Statement	Mean \bar{X}	Standard Deviation	Decision
19	Parents should ensure that the children are given all necessary immunization to prevent childhood illnesses and infant mortality	3.80	0.40	A
20	Parents should give their children nutritious food and clean water to prevent infection.	3.84	0.36	A
21	Government should take positive steps towards the implementation of health and nutritional policies by providing everything needed for the policy to work out.	3.63	0.49	A
22	Government should provide free or subsidized lunch in child care settings for pre-primary schoolchildren.	3.67	0.47	A
23	Adequate financial supply should be made available to	3.82	1.39	A

	equip and improve the primary health care system.			
24	Federal government should ensure that immunization coverage rate in all parts of the country is widened to reach the grassroots.	3.84	0.36	A
25	Government at all levels should be deeply involved and ensure that early childhood schoolchildren are properly fed.	3.70	1.46	A

Table 3 above showed that teachers identified items 19-25 as ways of enhancing good health and adequate nutrition for children in early childhood education. The mean scores and standard deviation range between 3.63-3.84 and 0.36-0.49, respectively.

Discussion

The findings of the study on table 1 on the importance of good health and nutrition in early childhood education include: the fact that good health and nutrition improve the nutritional status of young children, which in turn affects their social and emotional school readiness. Good nutrition during a child's first year of life determines the health outcome of that child. Exclusive breastfeeding for the first six months of life for instance helps the child to build good immune system. Good health care and nutrition prevents infant and under-five mortality rates, among others. The findings of this study are in consonance with the findings of Alo (2010) which indicate that good health and adequate nutrition are important in early childhood education.

The results on table 2 indicated that poverty, illiteracy, ignorance, financial misappropriation, cultural attitudes, among others were constraints to good nutrition for early childhood schoolchildren. This finding corroborates the observation of Egbunu (2002) who stated that ignorance, poverty, financial inadequacies; wars and natural disasters were constraints to good health and nutrition in the least developed and developing countries of Africa.

The result in table 3 revealed that health and nutritional status of children in early childhood school could be enhanced in a number of ways: Parents should give their children nutritious food and clean water to prevent infection. Government should provide free or subsidized lunches in childcare settings for pre-primary schoolchildren, among others. The finding is in line with Juke (2006), who stated that early childhood health and nutrition interventions improve all aspects of school readiness, especially the motor development. It also promotes equity. It is important to emphasize that preschool health and nutrition programmes have the potential to close the gap between the rich and the poor, rural and urban dwellers and boys and girls as well as help to achieve Education for all.

Recommendations

Based on the findings, the following recommendations are made.

- (i) Government should take positive steps towards the implementation of health and nutrition's policies by providing everything needed for the policy to work out.
- (ii) Government at all levels should be deeply involved by ensuring that all relevant health facilities and nutritional diets be made available to young children both at home and early childhood education centres.
- (iii) Adequate financial supply should be made available to equip and improve the primary health care system.
- (iv) The Federal Government should ensure that immunization coverage rate in all parts of the country is widened to reach the entire grass root.
- (v) Government should endeavour to eradicate persistent infant and under-five mortality. Each child is unique in his/her way endowed with special potentialities.
- (vi) Government at all levels should be deeply involved and ensure that early childhood schoolchildren are properly fed. They should shoulder the responsibility of subsidizing those children's feeding.

- (vii) Effective monitoring units should be mounted and equipped with necessary facilities to ensure that children in early childhood education centres receive appropriate health care and nutrition.
- (viii) Government should provide free or subsidized lunches in childcare settings for pre-primary schoolchildren.

Conclusion

Many educators have acknowledged the importance of early childhood education for children. Some writers assert that it is a powerful engine for personal development. Health and nutrition are complementary components without which life will be meaningless. Children therefore, need good health care and nutrition to help in their school success. In addition, children should not be marginalized. Their needs should be the nation's concern since these children are the legacy we leave behind when we are not there.

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