

Impact Of Nutrition On The National Education And Healthy Growth

Nutrition is an unavoidable factor in education and health growth of a nation. A healthy student is a productive student. Good nutrition is increasingly perceived as an investment in human capital that yields returns today as well as in the future, while bad nutrition is a treat to the nation. The global loss of social productivity in 1990 is caused by four overlapping types of malnutrition – stunting and disorders related to iodine iron and vitamin A deficiency – amounted to almost 46 million years of productive disability – free life nutrition raises returns on investment in education and health care. A body of literature observed that there is a heavy decline in knowledge in Nigeria from 1980s unlike the past years. Some attributed this decline to the malnutrition during the past civil war. A researcher noted that in the 1980s Nigeria had the lowest number of indigenous engineers of any Third World country. The teaching of English, which is the language of instruction beyond primary school, had reached such poor levels that university faculty complained their inability to understand the written work of their students due to ineffective communication there is a lot of quack graduates and workers in the country. By 1990 the crisis in education was such that it was predicted that in few decade to come, there would be insufficient personnel to run essential services of the country. This calls for a serious attention before the nation losses all her skilled labour force. I have categories these problems into two major nutritional factors, the problem of undernutrition and malnutrition. The purpose of this write up is to review the impact of nutrition on the present and past and necessary steps taken to arrest the situation. It will also provide some relevant solutions to the problem.

NUTRITIONAL PROBLEMS: Nigeria as a country is characterized by two major nutritional problems which includes undernutrition and micronutrient. The rest have little impact and may be reserved for now. Undernutrition is characterized by inadequate intake of macronutrients. It often starts in utero and may extend throughout the life cycle. It also spans generations. Undernutrition occurs during pregnancy, childhood and adolescence, and has a cumulative negative impact on the birthweight of future babies. A baby who has suffered intrauterine growth retardation (IUGR) as a fetus is effectively born malnourished, and has a much higher risk of dying in infancy. The consequences of being born malnourished extend into adulthood. During infancy and early childhood, frequent or prolong infections and inadequate intakes of nutrients (particularly energy, iron, protein, vitamin A, and Zinc) may add to the contribution of IUGR to preschool underweight and stunting. In Nigerian situation, infants after period of exclusive breast feeding are followed up with weaning which consist of pap, akamu, ogi, or koko and is made from maize (Zee Mays), millet (*pennisetum americanum*), or guinea corn (*sorghum spp.*). People from low income groups seldom feed meat, eggs, or fish to their infants, because of socio-economic factors, taboos, and ignorance. In Anambra State, Nigeria, Agu observed that pap contained only 0.5% protein and less than 1% fat, as compared with 9% protein and 4% fat in the original corn. This is usually due to poor processing. Akinele and Omotola investigated the energy and protein intake of infants and children of the low income group. They reported that about one-third to one-half of the infants suffered varying degrees of malnutrition and 10% were wasted and stunted. A more recent Nigerian National Survey conducted by the Demographic and health Survey (DHS) in 1990 placed the proportion of underweight children under five years of age (those below $\hat{a}??2SD$ weight-for-age) at 36% including 12% severely underweight. (below $-3 SD$). The prevalence of stunting (below $\hat{a}??2 SD$ height $\hat{a}??$ for $\hat{a}??$ age) was 43% including 22% severe stunting (below $\hat{a}?? 3SD$) while the levels of wasting and severe wasting were 9% and 2% respectively. In 1986 in Ondo State, Nigeria, DHS Survey of children aged 6 to 36 months is 28% prevalence for underweight, 32% for stunting, and 7% for wasting. For adults and older children, it is usually possible to achieve an adequate protein $\hat{a}??$ energy intake by increasing the daily intake of starchy foods of low nutrient density. For infants and small children, however, the volume of the traditional diets maybe too large to allow the child to ingest all the food necessary to cover his or her energy needs. A baby aged four to six months would need 920g of corn gruel to meet daily needs of energy (740 Kcal) and protein (13g). This is an impossible task, considering the size of an in fact's stomach. President Chief Olusegun Obasanjo rightly observed that almost half of children ages 7-13 in Nigerian are continue underweight. A lot of children and adults go to bed starved and some take one meal a day which mostly consists of carbohydrates. Micronutrient is another hard nut to break in the area of nutrition. It is the inadequate intake of key vitamins and minerals. It can be observed both among the rural and urban dwellers in Nigeria. The lack of vitamins and minerals result in irreversible impairment to child physical and mental development. Apart from the indirect effects on the mother, micronutrient deficiencies during pregnancy have serious implications for the developing fetus. Iodine deficiency disorders may cause foetal brain damage or still birth (mental retardation, delayed motor development) and stunting. Iodine deficiency in during foetal development and infancy has been shown to depress intelligence quotient levels by 10-15 points. Folate deficiency may result in neural tube or other birth defects and preterm delivery, and both iron deficiency anemic and vitamin A deficiency may have significant implications for the future infant's morbidity and mortality risk, vision, cognitive development reduce their ability to concentrate and fully participate in school and socially interact and develop. It is on record that 40% of children under 5 years of age suffer vitamin A deficiency. It is the major cause of preventable, severe visual impairment and blindness in children. The most vulnerable is a high percentage of pre-school children and pregnant women who are anemic. These two nutrition problem are enormous in Nigeria situation have a great impact in the economy and social life of the country.

THE EFFECT OF NUTRITION ON NATIONAL EDUCATION: Nutrition has a dynamic and synergistic relationship with economic growth through the channel of education. Behrman cites three studies suggesting that, by facilitating cognitive achievement, child nutrition and schooling can significantly increase wages. In utero, infant and child nutrition affects later cognitive achievement and learning capacity during school years, ultimately increasing the quality of education gained as a child, adolescent and adult. Parental education affects in utero, infant and child nutrition directly through the quality of care given (Principally maternal) and indirectly through increased household income. Human capital development, primarily through education, has received merited attention as a key to economic development, but early childhood nutrition has yet to obtain the required emphasis as a necessary facilitator of education and human capital development. A recent research shows that early childhood nutrition plays a key role in cognitive achievement, leaning capacity and ultimately, household welfare. For example, protein - energy malnutrition (PEM) deficiency, as manifested in stunting is linked to lower cognitive development

and education achievement; low birth weight is linked to cognitive deficiencies; iodine deficiency in pregnant mothers negatively affects the mental development of their children can cause delayed maturation and diminished intellectual performance; iron deficiency can result in impaired concurrent and future learning capacity. This goes a long way to prove that nutrition have a great impact to national education as Nigeria is fully experiencing this ugly impact now and in time to come.

THE EFFECT OF NUTRITION ON HEALTH GROWTH:

A health nation is a wealthy nation. Nutrition has a great impact on every nation's growth especially as we can see in Nigeria situation. Inadequate consumption of protein and energy as well as deficiencies in key micronutrient such as iodine, vitamin A and iron are also key factors in the morbidity and mortality of children and adults. Mal-nourished children also have lifetime disabilities and weakened immune systems. Moreover, malnutrition is associated with disease and poor health, which places a further burden on household as well as health care systems. Disease affects a person's development from a very early age. Gastro-enteritis, respiratory infections and malaria are the most prevalent and serious conditions that can affect development in the first three years of life. Infections affect children's development by reducing their dietary intake; causing a loss of nutrients; or increasing nutrient demand as a result of fever. Malnutrition also plays a significant role in morbidity among adults. The link between morbidity from chronic disease and mortality, on the one side, and a high body mass index (BMI), on the other has been recognized and analyzed in developed countries primarily for the purpose of determining life insurance risk. A study on Nigerian men and women has shown mortality rates, among chronically energy deficient people who are mildly, moderately and severely underweight to be 40, 140 and 150 percent greater than rates among non-chronically energy deficient people. A lack of micronutrients also contributes significantly to the burden of disease. Iron deficiency is associated with malaria, intestinal parasitic infections and chronic infections. Chronic iodine deficiency causes goiter in adults and Children and also affects mental health. Vitamin A deficiency significantly increases the risk of severe illness and death from common childhood infections, particularly diarrhoeal diseases and measles. In areas where vitamin A deficiency exists, children are on average 50 percent more likely to suffer from acute measles. A UN report states that improvement in vitamin A status have been reduction in mortality among children aged one to five.

EVALUATION OF THE PRESENT AND PAST EFFORTS:

There have been series of bold step toward solution finding by government and non-governmental organizations (NGO) to eradicate mal nutrition and its reacted effect both in the present and past, though some proved abortive due to bad government and economic dwindling which characterized the 1980s, to trace this chronologically. In 1983, the U.S. Agency for international Development (USAID) began providing assistance to the Nigerian Federal and State Ministries of Health to develop and implement programs in family planning and child survival. There focus was in three areas, but especially in the government and social services area. It will also be focused on catalyzing the growth and leverage of NGOs working at the community and national levels in health care support and democratization. The USAID committed and \$135 million to bilateral assistance programs for the period of 1986 to 1996 as Nigeria undertook an initially successful structural Adjustment program, but later abandon it. Plans to commit \$150 million in assistance from 1993 to 2000 were interrupted by strains in US-Nigeria relations over human right abuses, the failed transition to democracy, and a lack of cooperation from the Nigerian Government on anti narcotics trafficking issues. By the mid 1990s these problems resulted in the curtailment of USA ID activities that might benefit the military government. In 1987, The International Institute of Tropical Agriculture (IITA), under the principal Researcher Dr. Kenton Dashiell, Launched an ambitious effort in Nigeria to combat widespread malnutrition. They encourage using nutritious economical soybeans in everyday food. They further said that soybeans are about 40% protein rich than any of the common vegetable or animal food source found in Africa. With the addition of maize, rice and other cereals to the soybeans, the resulting protein meets the standards of the United Nations Food and Agricultural organization (FAO). Soybeans also contain about 20% oil which is 85% unsaturated and Cholesterol free. Though that is nice program for alleviation of malnutrition started at period, a lot of socio economic thorns hindered its proper function during this period. The world health organization (WHO) in 1987 estimated that there were 3 million cases of guinea worm in Nigeria about 2 percent of the world total of 140 million cases making Nigeria the nation with the highest number of guinea worm cases. In affected areas, guinea worm and related complications were estimated to be the major cause of work and school absenteeism. In August 1987, the federal government launched its primary Health care plan (PHC), which President Ibrahim Babangida announced as the cornerstone of health policy. Intended to affect the entire national population, its main stated objectives included accelerated health care personnel development; improved collection and monitoring of health data; ensured availability of essential drugs in all areas of the country; implementation an expanded Program on Immunization (EPI); improved nutrition throughout the country; promotion of health awareness development of a national family health program; and widespread promotion of oral dehydration therapy for treatment of diarrheal disease in infant and children. The president Chief Olusegun Obasanjo in 2002 meeting with the president international Union of Nutritional sciences (IUNS) promised to support a better coordination of nutrition activities and programs in Nigeria, he further said that "the high prevalence of malnutrition is totally unacceptable to this Government and he assured the IUNS president that he would do everything possible to ensure that resources are available to improve household food security greater access to healthcare services and better caring capacity by mothers including supported for breast feeding promotion. In the 27th September 2005 Nigerian President Chief Olusegun Obasanjo Lunched the Nasarawa State School feeding program at the Laminga primary school. The program is fully funded and administrated by the state of Nasarawa, which makes it a unique model in Africa today. The epoch making event is in fulfillment of one of the promises of combating malnutrition especially among children whom he observed that many at the age of 7-13 years are underweight. He further promises to reach out about 27 million children during the coming 10 years. The NAFDAC are also helping in arresting the issue of malnutrition through making and adequate evaluation of food and drugs used in the country. Other international bodies and NGO like the World Bank development fund; the world health organization (WHO); the United Nations agencies (UNICEF, UNFPA and UNDP); The African Development Bank; the Ford and Mc Arthur Foundation etc. All of them have contributed their own quarters to the improvement of the nation's health and nutrition.

CONCLUSION:

The greatest Solution to nutrition can be captured in this

slogan, "Catch them young", Children are most vulnerable to malnutrition in Utero and before they reach three years of age, as growth rates are fastest and they are most dependent on others for care during this period. However, nutrition intervention, such as school feeding program which has started in Nasarawa State among children of school age are also important for strengthening learning capacity. Training and nutrition education is very important. Nutrition education can easily incorporate into primary health care programs. The African Child survival program have reduced the high prevalence of malnutrition in many part of cause and an outcome of under nutrition economic losses from undernutrition includes, as percentages of total losses from all causes: foregone human productivity, 10 - 15% ; foregone GDP, % - 10 %.The government should also use mass media to create necessary attention when needed. The government should also try to reach out to people in the rural areas who have lesser access to variety of government interventions. Moreover, improved nutrition is a particularly powerful antipoverty intervention because it can be achieved at low cost and it has a life long impact. Investment in nutrition is one of the best options for economic growth and better social life.

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