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## Factors responsible for Malnutrition in Sub Saharan Africa: The Way Forward

Eze Alex Eugene Thomas

Department of Dietetics University of Nigeria Nsukka

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### ABSTRACT

Malnutrition means "bad nutrition" and technically includes both over-and under-nutrition. Malnutrition leads to irreversibly stunted development and shorter, less productive lives. Less productive lives mean no escape from poverty. Low levels of education especially in women are key perpetuators of poor nutrition practices in sub-Saharan Africa. Children under-five are the most affected, however male children tend to have better health status than females in certain communities. The problem is further aggravated by socio-cultural realities of the people. In Africa, funds accorded for fighting malnutrition are often embezzled. This paper asserts that improving government policy, increasing political will and application of community adapted strategies in tackling malnutrition is fundamental. It should be recognized, not only as a public health issue, but as a fundamental human right especially for children to eat. Starting life disadvantaged with adverse consequences from malnutrition (ill health, mental retardation, high malnutrition related morbidity and mortality resulting especially from under-five deaths) is a neglected but serious developmental hindrance to Sub-Saharan Africa. The solution to this problem of malnutrition in developing countries therefore calls for a multi-sectorial approach with well-defined and achievable goals.

**Keywords:** Malnutrition, Under-nutrition, Children, Poverty, Africa

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### INTRODUCTION

The World Food Programme (WFP) defines malnutrition as "a state in which the physical function of an individual is impaired to the point where he or she can no longer maintain adequate bodily performance process such as growth, pregnancy, lactation, physical work and resisting and recovering from disease". Contributing to more than half of deaths in children worldwide; child malnutrition was associated with 54% of deaths in children in developing countries in 2001 [1]. Protein-energy malnutrition (PEM), first described in the 1920s, is observed most frequently in developing countries but has been described with increasing frequency in hospitalized and chronically ill children in the United States [2]. Poor environmental conditions may increase insect and protozoan infections and also contribute to environmental deficiencies in micronutrients. Overpopulation, more commonly seen in developing countries, can reduce food adequacy, leading to inadequate food intake or intake of foods of poor nutritional quality and quantity. Conversely, the effects of malnutrition on individuals can create and maintain poverty, which can further hamper economic and social development [3]. This is explained with children starting life with low intellectual quotients and being impossible later to offer the best of their expected intellectual abilities. Kwashiorkor and marasmus are two forms of Protein Energy Malnutrition (PEM) that have been described. The distinction between the two forms of PEM is based on the presence of edema (kwashiorkor) or absence of edema (marasmus). Marasmus involves inadequate intake of protein and calories, whereas a child with kwashiorkor has fair-to-normal calorie intake with inadequate protein intake. Although significant clinical differences between kwashiorkor and marasmus are noted, some studies suggest that marasmus represents an adaptation to starvation whereas kwashiorkor represents a dys-

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adaptation to starvation. In addition to PEM, children may be affected by micronutrient deficiencies, which also have a detrimental effect on growth and development. The most common and clinically significant micronutrient deficiencies in children and childbearing women throughout the world include deficiencies of iron, iodine, zinc, and vitamin A and are estimated to affect as many as two billion people. Although fortification programs have helped diminish deficiencies of iodine and vitamin A in individuals in the United States, these deficiencies remain a significant cause of morbidity in developing countries, whereas deficiencies of vitamin C, B, and D have improved in recent years. This study therefore assesses the factors responsible for malnutrition on the continent.

### Contextual Clarification

The impact of malnutrition usually falls mainly on children under five years of age. Conceptually speaking, malnutrition generally involves nutrition and obesity. Africa is going through a rapid socio-demographic transition, with an alarming increase in incidences of obesity, diabetes mellitus, cardiovascular diseases (stroke and myocardial infarction). This paper focuses on under nutrition. Despite the sustainable development goals' target to reduce hunger, major failures have been recorded mainly in Africa. Out of the 800 million people still suffering from hunger in the world, over 204 million come from Sub-Saharan Africa. This increase has generally been attributed to poverty, illiteracy, ignorance, big family size, climate change, policy, corruption, among others. Infectious diseases are the major cause of mortality and morbidity in developing countries. PEM is also associated with a number of co morbidities such as lower respiratory tract infections including tuberculosis, diarrhea diseases, malaria and anemia [4].

### Causes of Malnutrition in Sub-Saharan Africa

#### Poverty

Poverty is unmistakably the driving factor in the lack of resources to purchase or otherwise procure food, but the root causes of poverty are multifaceted. Poverty, combined with other socioeconomic and political problems, create the bulk of food insecurity around the globe [5]. Food distribution discrepancies happen to be a major driving factor in perpetuating lack of food in most areas of Sub Saharan Africa. Malnutrition in childhood is known to have important long-term effects on the work capacity and intellectual performance of adults. Health consequences of inadequate nutrition are enormous. It was estimated that nearly 30% of infants, children, adolescents, adults and elderly in the developing world are suffering from one or more of the multiple forms of malnutrition, 49% of the 10 million deaths among children less than 5 years old each year in the developing world are associated with malnutrition, another 51% of them associated with infections and other causes [6]. Fluctuation of prices of foods on a global scale is likely to affect this already disadvantaged population. They generally do not have diversified commercial food choices to provide in the world market. Their dependence once upon a time on incomes from commercial crops, almost exclusively in some areas, like Cocoa and Coffee was matched by serious suffering, malnutrition and disease when the prices of these products experienced dramatic drops in the world market [7]. Focusing on children under the age of five, who are the most affected by malnutrition in Sub Saharan Africa, a vicious cycle has been described to actually exist between poverty and malnutrition. In fact, the World Bank estimates that on average, individuals suffering from malnutrition lose 10 per cent of their potential lifetime earnings. This has a much broader impact too; in the same report the World Bank found that countries can lose 2-3 per cent of their GDP because of under nutrition [7]. Malnutrition has in some instances been actually considered, and generally is considered as a poverty indicator. Malnutrition leads to sub optimal intellectual development. Knowing that children are the future of any society, an unproductive generation shall thus be prone to be poor, completing this poverty malnutrition chain [8]. Malnourished women usually have malnourished fetuses during pregnancy, delivered generally with low birth weights and consequently growing into physically and mentally stunted children. Stunted adults imply low human capital, low incomes and poverty. The second problem is the co-existence of under-and over-nutrition in the same household, family or community. This double burden is extended to a double burden of disease. Therefore, as in many other developing countries, the over-nutrition-related diseases emerged before the battle against under-nutrition deficiency diseases has been won. This phenomenon can, at least partially, be explained by the effects of foetal malnutrition and the low quality of staple-food diets (sufficient energy but not enough micronutrients) in poor households. However, the relationship between household food insecurity and the overweight status of mothers and children are not only observed in developing countries but also prevalent in the developed world [9].

#### Education and Malnutrition

Improving the educational status of parents, especially of mothers, on nutrition, sanitation and common disease prevention strategies should logically reduce the malnutrition related mortality and morbidity. It is said

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that the way to the child's stomach is through the mind of the mother. Quality of food taken, choices and quantity are all at the discretion of the mother or care giver. This problem is very crucial in Sub Saharan Africa, where access to formal education for the girl child in certain communities is still a major burning challenge. The burden of malnutrition has been directly linked to poverty, quality of food intake, excessive disease and poor health status [7]. The relationship between education and poverty is too close, and virtually integrates into the virtual cycle of ignorance, disease and poverty. Education could help reduce excessively large family sizes that are usually seen in most regions of Sub Saharan Africa. A poor community of certain cultural beliefs might not actually realize that giving birth to a fewer number of children might actually help them to match their limited resources, and also offer adequate and quality nutrition to the family. Musgrove et al describes three important ways that ignorance and lack of education contribute to malnutrition. First people may know very little about vitamins or nutrients, and they fail to eat even the cheap and available ones. Secondly, ignorance about causes of disease and its consequences. Treatment and prevention options maybe most of the time very accessible and cheap. Poor hygienic conditions and the inability to control some intestinal parasites (*Ascaris Lumbricoides* and Hook worms) have serious impacts in competing for nutrients with the host, causing anemia and suppressing appetite. Huge decreases in school performance amongst children infected by these parasites have been reported. Thirdly, some people might be ignorant on how to care for their young children as they might undervalue healthy practices like breastfeeding, offering vitamins and other micronutrient rich foods to their children [10]. Improvements in women's education have contributed by far the most accounting for 43 per cent of the reduction in child malnutrition between 1970 and 1995 while improvements in per capita food availability contributed about 26 per cent [11]

#### **Socio-cultural and Religious Factors**

Breastfeeding practices and weaning foods are associated with malnutrition. Maternal educational level, maternal age, marital status, availability of pipe borne water and latrines have been reported to be associated with malnutrition [12]. Childhood malnutrition is accounted for by contextual effects over and above likely compositional effects, that urban-rural differentials are mainly explained by the socioeconomic status of communities and households, that childhood malnutrition occurs more frequently among children from poorer households and/or poorer communities and that living in deprived communities has an independent effect in some instances. Socioeconomic inequalities in childhood malnutrition are more pronounced in urban centers than in rural areas.

#### **Gender and Malnutrition**

Intra family gender inequalities in food distribution and nutritional status have been observed. For instance, in Bangladesh, 54 % of malnourished children are females and have a likelihood of 1.44 times greater to be malnourished than males [13]. Often, women are the key victims of malnutrition. In households which are vulnerable to food insecurity, women are at greater risk of malnutrition than men. Malnutrition in mothers, especially those who are pregnant or breastfeeding can set up a cycle of deprivation that increases the likelihood of low birth weight, child mortality, serious disease, poor classroom performance and low work productivity [14]. According to the Food and Agricultural Organization, FAO, vulnerable women and girls are more likely to die of malnutrition than men and boys. Social and economic inequalities between men and women often stand in the way of good nutrition [14]. This condition is seen in South Asian and African communities, where boys and men are culturally selected to eat more nutritive foods such as eggs [14].

#### **CONCLUSION**

Regardless of extensive global economic growth in recent decades, including in some of the poorest countries in Africa, millions of people remain locked in a vicious cycle of hunger and poverty. Poverty means parents can't feed their families with enough nutritious food, living children malnourished. Malnutrition leads to irreversibly stunted development and shorter, less productive lives. Less productive lives mean no escape from poverty. Low levels of education especially in women are key perpetrators of poor nutrition practices in this region of the World. Children under-five are the most affected. Male children tend to have better health status than females in certain communities. The problem is further aggravated by socio-cultural realities of the people. In Africa, funds accorded for fighting malnutrition are often embezzled. Accordingly, improving government policy, increasing political will and application of community adapted strategies in tackling malnutrition is fundamental. It should be recognized, not only as a public health issue, but as a fundamental human right especially for children to eat. Starting life disadvantaged with adverse consequences from malnutrition (ill health, mental retardation, high malnutrition related morbidity and mortality resulting especially from under-five deaths) is a neglected but serious developmental hindrance to Sub -

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Saharan Africa. The solution to this problem of malnutrition in developing countries therefore calls for a multi-sectoral approach with well defined and achievable goals. The ministries of health, education, agricultural, environment, universities and research organizations and other non-governmental organizations as well as international donors must work together if any tangible outcomes are expected.

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