# TRACKING DOWN THE MENACE OF ACUTE MALNUTRITION THROUGH HOME ECONOMICS EDUCATION OF NIGERIAN RURAL WOMEN

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Abstract: Acute malnutrition is problem of hunger, food insecurity and poor environment. It is a major killer of children under five years and the greatest public health concern of the century, accounting for about one million deaths per year in sub-Saharan Africa. Nigeria is among the few countries of the world having the highest rates of acute malnutrition with some states having rates above the emergency levels. Acute malnutrition is found among the poor, usually associated with food insecurity, dietary deprivation, poor environmental condition and constant infections. Majority of the primary care-givers (women) living in rural communities are illiterate, unskilled, extremely poor and lack opportunity to develop themselves. The purpose of this paper is to highlight the scale of acute malnutrition in Nigeria and the factors which lead to its high prevalence. This paper posits that empowerment of Nigerian rural women through purposeful skill training will help to improve their income and reduce poverty. Their empowerment with parenting skills, nutrition knowledge and other health promoting skills which are important aspect of home economics education will result in better health of the children and a reduction in the rate of acute malnutrition in Nigeria. The paper recommended that home economics extension services be provided in all rural communities to help in skill training and empowerment of the rural women. Policies which enhance food production and distribution should be enacted, and interventions focusing on improving sanitation and water quality in Nigerian rural areas should be embarked upon by all levels of government. First ladies should make women and children the focus of their pet projects.

Keywords: Acute Malnutrition, Nigeria Rural Women, Home Economics Education and Extension,

### Introduction

Undernutrition is highly prevalent among children in Nigeria, manifested in its different forms – stunting (or chronic malnutrition) wasting (or acute malnutrition), under weight and micronutrient deficiencies (hidden hunger). (National Demographic Health Surveys [NDHS], 2013) revealed that as many as 37%, 18% and 29% of Nigerian children under five years are stunted, wasted and underweight respectively. Of all the forms of under nutrition, acute malnutrition is the most devastating, being associated with the highest mortality risk (UNICEF, 2013). Acute malnutrition is a life threatening condition, a predictor of mortality in children under five years, and in fact a measure of population emergency status. Acute malnutrition or wasting is an acute phenomenon caused by a relatively recent food shortage or crisis (or a recent under malnutrition)

which induces acute and severe weight loss (UNICEF, 2009). It is defined as weight-for-height median below minus 2 standard deviation (WHM <-2SD) of the reference population. It signifies acute energy and protein malnutrition (WHO, 2010), as well as micro nutrient deficiencies (Golden, 2009).

Global – Acute – Malnutrition (GAM) refers to the percentage of children in a population who are wasted or have low weight-for-height, which may manifest as Moderate–Acute–Malnutrition (MAM) or Severe–Acute–Malnutrition (SAM) (WHO, 2010). Severe Acute Malnutrition (SAM) is a particularly life threatening condition which kills children by eroding the immune system, predisposing them to frequent infectious diseases that expedite deterioration and death, and by increasing the case fatality of common childhood illnesses (UNICEF, 2009). Nigeria has one of the highest rates of acute malnutrition in the world, being ranked 13th in the global classification of countries with the highest rates (UNICEF, 2013). At 18%, Nigeria's Global Acute Malnutrition (GAM) rate is higher than the internationally recognized emergency level of 15% (ACF, 2015). Consistent with the high GAM rates, Under–5–Mortality Rate (U5MR) is also high, making Nigeria's MDG of halving U5MR from 128/1000 in 1990 to 64/1000 in 2015 unrealistic (Federal Ministry of Health [FMOH], 2011).

The environment where children live and the characteristics of their caregivers affect their health status. Most Nigerian women who are the primary caregivers of children are illiterate, unskilled, very poor, unhealthy addicted to harmful childcare practices and lack opportunities to develop their minds and spirit. UNICEF (2013) noted that SAM is often found among the poor, usually associated with dietary deprivation, poor environmental conditions and constant infection. (NDHS (2013) observed that rural Nigerian children were more stunted, wasted and underweight than urban ones. Similarly, children of mothers with no education were more than 3 times as wasted as those whose mothers have completed secondary education.

This paper will attempt to highlight the scale and consequences of acute malnutrition in Nigeria, the factors leading to its high prevalence and how it can be reduced by empowering rural Nigerian women with Home Economics training. It will also emphasize the components of Home Economics related skills which can help caregivers to overcome acute malnutrition.

## The Scale and Consequences of Acute Malnutrition in Nigeria

Nigeria has one of the highest rates of a cute malnutrition in the world. Several surveys revealed that the rate is not only high but consistently increasing in Nigeria. NDHS reports of (2013) revealed that the average prevalence of GAM among Nigerian children under five years has risen from 11% in 2003 to 14% in 2008 and 18% in 2013. At 18%, the GAM rate is far beyond both the warning level of 10% and the crisis level of 15%. ACF (2015) noted that Nigeria's GAM rate is higher than West and Central Africa's mean, and

5% higher than the Sub-Saharan African mean. High rates of acute malnutrition are consistent with high rate of child-mortality in Nigeria. (FMOH, 2011)

The rates of GAM and SAM are unequally distributed across the geographical zones of Nigeria, with the North Western Zone having the highest prevalence of GAM and SAM (27.3% and 15.3% respectively), followed by North East (19.5% & 9.3%,) South East (11.9% & 4.4%), North Central (11.7 & 4.3%), South South (11.1% & 3.6%) and South West (10% & 3.0%). Many states in the North West and North East have extraordinarily high rates of SAM. The rates of GAM in Kaduna, Kano and Katsina states are 41.7%, 39.7% and 24.3% respectively. The rates of SAM in the three states are 27.6%, 25.1% and 12% respectively. The acceptable rates 8GAM and SAM in any population are 2–3% and 0.14%, respectively. SAM is the most important reason for nutrition intervention strategies worldwide (UNICEF, 2013).

Acute malnutrition, particularly SAM is currently the highest public health concern in the globe. It is a leading cause of Under-5-Mortality-Rate and the most important cause of paediatric admission worldwide (UNICEF, 2013). Mortality rates are 9 times higher in SAM children than in well nourished ones (SAM Expert Group, India, 2006). In North Western Zone of Nigeria, mortality rate is as high as 217/1000 live births due to high prevalence of acute malnutrition in the zone (NDHS, 2008). Community Management of Acute Malnutrition (CMAM) services have been available in eleven states in Northern Nigeria (Adamawa, Bauchi, Borno, Gombe, Jigawa, Kano, Katsina, Kebbi, Sokoto and Zamfara States) since 2008 (ACF, 2015). Despite the interventions, the incidence of acute malnutrition continues to increase in these zones. Invariably a fundamental approach involving the children's caregivers and home environment would be required to stem the tide of acute malnutrition in the vulnerable areas.

### Factors Associated with Acute Malnutrition

Some recognized factors leading to acute malnutrition include harmful culture, food insecurity, poverty, maternal illiteracy, poor sanitation and poor child care practices. Cultural and social practices which lead to exclusion of, and restriction of children from essential foods contribute to poor feeding patterns and incidence of malnutrition. Cultural beliefs and ignorance are directly associated with poor Infant and Young Child Feeding (IYCF) practices, inadequate feeding during illness, improper food distribution among family members and poor maternal care. Educational and counseling strategies which focus on counteracting myths related to infant feeding practices are essential.

Poverty determines household food security and affects the capacity of segments of the population to afford nutritious foods (Save the Children, 2010). Inequality in wealth is indirectly related to the proportion of children suffering from acute malnutrition. NDHS (2013) found that the incidence of acute malnutrition is related to family socioeconomic status, amount of foods consumed, environmental factors such as quality of water supply and place of residence. Household food insecurity is a major cause of hunger

and malnutrition in developing countries, and a contributing factor to low weight-forage in young children. Food insecurity is a household situation in which the individual experience outright hunger or specific coping mechanisms (Agrawal, 2010). Food insecurity is currently at emergency level in Nigeria. Households that are food insecure are five times more likely than food secure ones to have wasted children (Save the children 2010). In a community in Kenya where wasting was prevalent among children, the caregivers were reported experiencing food shortages. They coped by reducing the amounts of foods eaten and by eating less expensive foods (Kumair Murage *et al*, 2011). Ensuring food security may reduce the prevalence of acute malnutrition, including the need for hospitalization. Household access to foods in Nigeria is influenced by the ability to preserve staple foods to meet future needs, ability to grow some foods throughout the year and ability to buy enough food to meet any shortfall (Save the Children, 2010). The annual cycle of excess, followed by a surfeit when food reserves are exhausted (known as hungry season) is a common feature in Nigeria. Kerac (2008) found that the number of children affected by acute malnutrition regularly peaks during the "hungry season".

Maternal illiteracy, low level of education and lack of empowerment of women have been correlated with stunting, wasting and underweight in many studies (NDHS 2003, 2008, 2013). Compliance with IYCF best practices in Nigeria was found to increase with mothers' level f education (NDHS, 2013). On the other hand, children of mothers with no education were found to be 3 times as wasted as those whose mothers have completed secondary school. Poor sanitation is a major cause of malnutrition. Safe and pure water, appropriate disposal of waste and hygienic preparation of foods are essential elements in preventing acute malnutrition (Manany & Solomons, 2007). These are impossible to mobilize in the context of extreme poverty. Recurrent, overt infections and constant exposure to microbes in the environment impairs linear growth and weight gain through immunostimulation. The sudden upsurge of refugees and Internally Displaced Persons (IDPs) in Nigeria, with several families living in poor environmental conditions is likely to worsen the prevalence of acute malnutrition in the country. The use of pit latrines and poor disposal of waste and faeces were strongly linked with wasting in children aged below five years in India (Kumar et al., 2006). Diarrhea in young children was also attributed to poor sanitation and water quality. Interventions focused on improving sanitation and water quality could reduce acute malnutrition.

Maternal undernutrition increases the risk of giving birth to low birth-weight babies. The major prenatal causal factors for wasting are poor maternal weight gain, low BMI, anaemia and malaria (Mortreal & Young, 2012). A study in India showed that maternal short stature and low maternal BMI increased the risk of wasting in children (Montorel & Young, 2012). Maternal undernutrition even before five months of age (BMIx18.5kg/m²) is reported in 18.4% of women of child bearing age in Katsina State, Nigeria (NDHS, 2013) The problem of maternal undernutrition in Northern Nigeria is compounded by the overall status of women where early pregnancies are high and women education is very low (FMOH, 2011).

**Insecurity:** Insurgency and the displacement of families from their homes, farmlands and businesses have become a major causal factor increasing the prevalence of wasting in Nigeria. IDPs are generally exposed to bad living environments and severe food shortages. This is a risk factor for acute malnutrition.

## The State of the Nigerian Rural Women

The pattern of life of majority of Nigerian rural women is conditioned by male dominated institutions relating to the family, society and economy. The traditional norm of a woman remaining in the house and of a male providing protection is widely practiced. The prevailing social norms leave women dependent. Educational deprivation of girls and women is a common feature in rural Nigerian communities. Nigeria ranked 18th out of 38 African nations whose enrollment for girls in primary schools is significantly lower than that of boys (World Bank, 1995). Low level of education and skill training, and limited access to resources depress women's quality of life, economic efficiency and independence. This creates a human development problem. Drinkater (2005) described the state of Nigerian woman as that of "hunger, lack of shelter, being sick, and not being able to see a doctor, having illness due to hunger, unclean water and lack of money, powerlessness and lack of freedom". Most barriers to women empowerment are ingrained in the culture.

## The Role of Home Economics Education in Women Empowerment

Empowerment is a major procedural concern when addressing human rights and development. The MDGs point to empowerment as a necessary step to overcome the obstacles associated with poverty and underdevelopment. Empowerment can be defined as changing the environment within which people live and helping them build and capitalize on their own potentialities (Drinkater, 2005). It is also seen as the process which enables individuals and groups to fully access personal and collective power, authority and influence (Severine & Shahani, 2009). Empowerment encourages people to gain skills and knowledge which help to overcome obstacles in life. Activities which seek to empower people are expected to give people skills, resources, authority, opportunity and motivation which will contribute to their competencies and satisfaction (Argawal, 2010).

Home Economics is a people-oriented discipline with salable skills which make for self-reliance and sustainability. It provides the individual with basic strategies to overcome poverty. Home Economics education provides a balance between theoretical understanding and addressing everyday problems practically. It contributes to empowering people to become active and informed members, facilitators, teachers and resource managers in the home and society. The important role of Home Economics Education in tackling all forms of malnutrition are embedded in some of its objectives as stated in the National Policy on Education (NPE, 2008) as follows:

• to create home and community environment conducive to the healthy growth and development of all members of the family at all stages of the family's cycle.

- to nurture the young and foster their physical mental and social growth and development.
- to make and carry out intelligent decisions regarding the use of personal, family and community resources.
- to plan consumption of goods and services in ways that will promote values and goals established by the family.

There are various skill empowerment components through the different aspects of the Home Economics discipline. These include entrepreneurial skills, parenting skills, health promoting skills and managerial skills components which will result in better health of the family and reduction of malnutrition.

- Entrepreneurial Skills Home Economics is an entrepreneurship oriented discipline. It can be used to empower women (and girls) with practical skills necessary for setting up small and medium scale enterprises. This would increase their earnings and boost their food purchasing power. Empowering women with skills, resources, authority, opportunity and motivation will contribute to lasting competencies and satisfaction (UNDP, 2011). Ari (2010) outlined the entrepreneurship components of Home Economics education as:
- Catering services, restaurants, snack shops
- Clothing ad textile business
- House-keeping services and interior decoration.
- Crop, livestock, poultry and fish farming.
- Hair dressing
- Soap-making and household cleaning agents

Home Economics related businesses require little capital and can be run from home.

- Health Promoting Skills: The Food and Nutrition aspect of Home Economics empowers women with knowledge, attitudes and best practices related to good nutrition and healthy feeding practices. This will lead to improved child feeding practices and reduction of acute malnutrition. Home Economics education impacts on several other health related issues such as personal and community health, hygiene, sanitation, management of communicable and on communicable diseases.
- Parenting Skills: Good parenting and child care skills are components of Home Economics education embedded in the child-development aspect. These will lead to better child care practices and reduction of undernutrition.
- Managerial Skills: taught in Home Economics would empower women to manage family resources and plan the purchase and consumption of goods in ways that will promote healthy living.

The key subject areas of Home Economics include Foods and Nutrition, Family resource management, Clothing and textile designs, Family life education and Child-Development and Personal and community health. The designs, instructional contents and practical skills acquired from every subject area will result in improvement of knowledge, reduction

in poverty, improvement of health status and a reduction in the prevalence of acute malnutrition.

## Recommendations

- 1. Acute malnutrition should be tackled as an explicit part of the development agenda in Nigeria. If the MDG of reducing child mortality by 50% is to be met, wasting should be addressed, not only in high rate areas or during emergencies, but wherever, it is identified. Since GAM rates are up to the warning level (10%) in all the geographical zones, coverage of intervention programmes should be expanded to each all the states of Nigeria, so that efforts will not be counter productive.
- 2. Prevention of all forms of malnutrition is ideal. This can be undertaken through well established interventions, for example expanding access to high quality foods, quality health care, improved water sources and sanitation, micronutrient supplementation for Nigerian children etc. The Federal, state and local governments should embark on rural water development projects to provide clean and usable water to the rural populace. Efficient waste and faeces disposal facilities should be extended to the rural areas to reduce infections diseases.
- 3. Home Economics extension services should be provided in all Nigerian rural communities. The extension workers will engage in skills development and economics empowerment, as well as dietary counseling of the rural women. Dietary messages should be formulated to have sufficient practical content, for improving infant and young-child feeding skills.
- 4. Ensuring food security will help to reduce the incidence of acute malnutrition Nigeria. Policies which encourage sufficient food production, such as those related to fertilizer subsidies, soft loans to farmers. etc, can enhance food production. Food subsidy provided for poor rural dwellers can also help to improve food intake

and nutritional status, as well as reduce acute malnutrition.

- 5. Improvement of the socio- economic status of the principal child caregivers (women) will help to improve the nutritional women would help to improve the nutritional status of children and reduce the prevalence of acute malnutrition. Women should be the main focus of empowerment and emancipation programmers in Nigeria. Micro credits intervention focusing on rural women should be put in place through the micro- finance banks. This will enhance entrepreneurship and improve the income of the women, leading to better household food security.
- 6. First ladies are relevant in empowering women. First ladies at all levels of government should use their position, as well as direct their pet projects towards improving the lives of rural women and children. They should champion the skill training, nutrition counseling and health programmers, and ensure that these get to the grassroots.

### Conclusion

The rate of acute malnutrition among Nigerian children under five years is both critically high and on a steady increase. This trend is even worse in states where intervention programmers have been mounted by the federal government. Empowerment of the

primary caregivers through skills training, health education and dietary counseling provided by the Home economic discipline can help to improve the income of rural women; strengthen household food security enhance food/ nutrient intake improve hygiene habits and reduce the prevalence of acuter malnutrition in Nigeria.

## References

- Action La Faim (ACF) (2015). Severe Acute Malnutrition Management in Nigeria; Challenges, Issues and the Road Ahead. Accessed 20<sup>th</sup> May, 2016.
- Agrawal, B. (2010); Gender and Green Governance. The Political Economy of Women's Presence within and beyond Community Forestry. New York: Oxford University Press.
- Ari, C.O. (2010). Global Economic Meltdown; Its Implication for Home Economics Education. JOWICE 14 (1): 219–223
- Babatope, B.F. (2006). *Teaching Home Economics Education in Colleges of Education and Universities* Zaria, Ahmadu Bello University Press.
- Drinkater, M. (2005). Gender Reform. CARE http/www.com accessed on 01/01/2016.
- Drinkater, M. (2005). Gender Reform. CARE. http://www.com/accessed on 01/01/2016
- Federal Government of Nigeria (2008). National Policy on Education.
- Federal Ministry of Health (FMOH) (2011): Saving Newborn Lives in Nigeria in the Context of the Integrated Maternal Newborn and Child Health Strategy. 2<sup>nd</sup> Edition, FMOH, Save the Children Abuja: Jhpiago, 2011.
- Kumair Murage, E.W., Madise, N.J. Fotso, J.C. Kyobutungi, C., Mutual, M.K., Gitau, T.M. and Yatich N. (2011). Patterns and Determinants of Breastfeeding and Complimentary Feeding Practice in Urban Informal Settlement in Nairobi, Kenya. BMC Pregnancy and Childbirth 2011, 11: 396.
- Manary, J. & Solomons, N.W. (2007). Public Health Aspects of under Nutrition in Gibney. M.J., Margetts. B.M. Kearney J.M. & Arab L. (eds): Public Health Nutrition: UK, Blackwell Publishing.
- Mantorel, R. and Young, M.F. (2012). "Pattern of Shunting and Wasting; Potential Explanatory Factor", Journal of Advanced Nutrition Vol 3 PP 227–23.
- Nigeria Demographic and Health Survey (2013) National Population Commission. Measure DHS, ICF International
- Save the Children (2010): Nutritional Anthropometric Survey: Daura & Zango Local Government Areas, Katsina State. Northern Nigeria. London: Save the Children.

- UNDP (2011) "Empowerment". A Monograph. Accessed on 29/05/2016.
- UNICEF (2007). Equity in Employment. The State of the World's Children. New York. United Nation's Children Fund.
- UNICEF (2009); Tracking the Progress on Child and Maternal Nutrition. A Survival and Development Priority. Nov. 2009.
- UNICEF (2009); Tracking the Progress on Child and Maternal Nutrition. A Survival and Development Priority. Nov. 2009.
- UNICEF (2013): Ready to Use Therapeutic Food for Children with Severe Acute Mal Nutrition. Position Statement. Geneva: WHO. Accessed on 14/03/2015.
- WHO (2010): Nutrition landscape Information System (NLIS): Country Profile Indicators. Geneva WHO.
- World Bank (1995). Development in Practice: Toward Gender Equity. Washington D.C. The World Bank.

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