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The Co-Existence of Obesity and Malnutrition: Educating the People in Ethiopia

INTRODUCTION

Concerns about demographic projections for population growth have taken a downward turn recently with the most recent models projecting a peak of world population of approximately 9.2 billion late in the 21st century. While this figure is nearly 50 percent above current population, it represents a slowing of the growth rate used in previous forecasts. Although this is certainly good news on a global level, many individual countries will continue growth at levels far above the median. Add to this the fact that these countries are predominantly among the most impoverished and malnourished, and you have a recipe for unprecedented starvation and disease.

The African continent encompasses many nations which exemplify these conditions. Among these, Ethiopia's demographics make it the poster child for human suffering on a colossal scale. The current population of 73 million is projected to more than double by the end of this century. This fact, combined with the country's already staggering levels of malnourishment and disease ensure that Ethiopia will be at the epi-center of human suffering on our planet for many years to come.

As reported in Global News, obesity, along with HIV Aids and malnutrition, are prevalent in Africa. According to the survey results printed, in South Africa, one in every three adult men and more than one in every two adult women are overweight and obese. Forty percent of the Moroccan population is overweight. Ethiopians face malnutrition and hunger while their neighbors suffer the health risks associated with obesity. Due to economic constraints, the people of Africa lack enough food to meet their nutritional needs. The quality of food intake is adjusted when faced with food insecurity. Thus, food insecurity is just as likely to cause people to be overweight as it is to cause hunger, both resulting in malnutrition. The hidden crisis in Africa suggests food scarcity is the underlying cause of both obesity and hunger.

In the Horn of Africa, the typical Ethiopian family is larger than those in most countries. They may have many generations living under the same roof with the eldest male, usually the grandfather, as the head of the household. Both men and women work in agricultural jobs. The women are responsible for child rearing and homemaking duties. Females are married off in arranged marriages when they are fifteen and they go to live with their husband and sometimes his family. These marriages are often arranged with girls as young as eight. Men are not allowed to get married until they are eighteen, so they usually stay at home longer.

People in Ethiopia usually only eat one or two meals a day. The meals that they get typically do not include any meat for economic reasons, but also for religious reasons. If they were to go to the market and buy a chicken it would cost a whole day's pay. If the family works in agriculture, the family may get more food compared to a family who lives and works in the city and must purchase all their food. Known as the land of grain and honey, most agricultural farmers live off the land. In the city, women in the family usually work as servants or other menial jobs. In total, the average Ethiopian family makes about seventy dollars a month. The

malnourished in Ethiopia are the children. They are lucky if they live to be 6 years old because over twenty percent of all children die by the age of six.

AGRICULTURE

Working in more than 100 countries throughout the world, the International Save the Children Alliance created Save the Children US to create a Food Security Program. Save the Children has focused on understanding why malnutrition and obesity co-exist in countries where there is little correlation to varying socio-economic condition. Neighbors live side-by-side, work the same size plots, cultivate similar ground, and face the same weather-related elements, yet some families are better able to survive without malnutrition. Save the Children considers these families “positive deviants.” This international alliance attempts to help farm families adapt new crops and diversify, in an effort to reduce their risks to food insecurity.

“The Save the Children's approach to reducing risks of and vulnerabilities to food insecurity is to promote the diversification of household food production systems, which includes promoting new food crop mixes of cereal and grain legumes, root and tubers, home garden systems with a wide range of nutritious vegetable species, and planting multi-purpose fruit and firewood tree species.” (Fiebig) Diversification will improve the food supply as well as increase the quality of diet. Through biodiversity in home gardens, families will strengthen their immune systems and minimize the symptoms of HIV/AIDS as they increase vegetable consumption.

Farming in Ethiopia accounts for eighty-five percent of the jobs, yet many of the farmers in Ethiopia cannot produce enough food to feed their families. They cannot make enough food because their soil is very low in quality from years of planting and then doing nothing to replenish it, resulting in erosion of valuable topsoil. Ethiopia produces a little over one ton of agricultural product per hectare while American farms produce a little over six tons per hectare. On average, farms in the United States produce six times the amount as farmers in Ethiopia. Coffee is Ethiopia's main cash crop.

The situation in Ethiopia is deteriorating every year. There are many reasons for this, but the main one is lack of rain. Some of the land would be able to be irrigated but many of the farmers cannot afford the high priced equipment that is needed. Another reason that the farmers are not getting very good crops is because of soil erosion. They are not doing anything to stop this because they have not been educated on the proper techniques for doing so. Even if they did know how to stop the erosion many farms could not afford to buy all the items they would need to implement erosion reducing techniques. “In Ethiopia, as well as in Africa and the Developing World at large, there is a tendency for governmental and non-governmental agencies to use 'blue-print' approaches, which expect all agro-environmental systems to respond favourably to almost identical irrigation development packages.” (Aberra)

People who live in rural areas have a harder time getting food and water because they do not have transportation and markets are not within walking distance, so they may only go once or twice a month. Many problems have nothing to do with producing or harvesting the crops, but with transporting them. In Ethiopia, the bigger farms produce enough crops to feed families, but their markets do not function with enough efficiency to support their population. They also have many smaller family-run farms which would produce enough for their families, but they must sell portions of their crops to buy other necessities.

EDUCATION

Only the oldest boy gets an education because a typical family cannot pay for the other children to attend school. Families rarely educate their daughters because when they are married they are expected to clean, cook, and have babies. However, this is changing. Public support for educating girls and empowering women in Africa is evidenced in programs offered by the Campaign for Female Education (CAMFED). Author of the book, "I Don't Know How She Does it", Allison Pearson, states this about educating the girls of Africa, "If you educate a girl, you educate a community. If you want to make poverty history, you let women play a role."

Many farmers are quitting the business every year not only in the United States but also in Ethiopia. Farmers in both countries are stopping for the same reasons: they are not making enough money to support themselves and their families. They are moving into cities and getting labor jobs since they have not had training in any other field. Farmers in America do have one advantage in that they have gotten an education at least through high school if not some college as well. Farmers in Ethiopia do not have an education on which to rely. Their choices are limited. Every year the drought that they are having gets worse and worse. Therefore, until they learn how to improve their crops and make enough to feed their families there are going to be farmers leaving the business everyday. It is their lack of education that sets boundaries for themselves and stifles hope for their family.

With overnutrition and the alarming growth rate of obesity, one might expect that starvation is a thing of the past. Quite the contrary; children in developing countries are dying from disease and malnutrition. "Furthermore, a lack of calories and nutrients--or undernutrition--can worsen the effects of infectious disease, and thereby causes half of all child deaths worldwide, report public health experts at The Johns Hopkins University and the World Health Organization in the 1 July 2004 issue of the American Journal of Clinical Nutrition." (Potera) Laura Caulfield is a nutritionist at John Hopkins who studied child deaths in sub-Saharan Africa and Southeast Asia. The weight-for-age information was compared to the average weight-for-age of healthy children in the United States. "Overall, the team found having a low weight-for-age score is a leading risk factor for child deaths, accounting for 52.5% worldwide. Among individual diseases studied, undernutrition is responsible for 60.7% of deaths from diarrhea, 57.3% of deaths from malaria, 52.3% of deaths from pneumonia, and 44.8% of deaths from measles." (Potera 802) Caulfield found that children who are small for their age but may not be classified as malnourished are twice as likely to die as children of normal weight.

SUGGESTIONS

Education can bring about the changes necessary for Ethiopian farmers, for the empowerment of women, and for healthy children. Educational programs from Save the Children teach the farmers about crop diversification and nutrition. These programs must be continued and be enhanced to include educating young people about hygiene and healthy living. CAMFED is beginning to set the path for educating girls and empowering women to make drastic changes in Africa. The conditions causing the present deterioration in African history took hundreds of years. Although education may be the key in making necessary changes, it will undoubtedly take time. Change is not easily accepted, particularly when customs and rituals which provide the structural framework of the society are altered.

A farmer exchange program could be implemented in Ethiopia, where farmers from other countries teach about irrigation and crop rotation. Seed companies may donate seeds and equipment to facilitate the programs. Ethiopia has its cash crops of coffee, cotton, tea, sugar, and

tobacco. They export a lot of exotic flowers that do not grow any other place. They also have the largest amount of cattle in Africa and the tenth largest amount in the world. They are also investing a lot of time and money into building up there fishing reserves. They are able to count on their mining for money. Ethiopia mines gold, silver, and platinum. More recently, the debt relief offered to Ethiopia will help in their economic recovery.

It is sad that about the same percentage of children are overweight in America as there are underweight in Ethiopia. Current estimates suggest that 30 percent of American children are overweight and that number is on the rise everyday. Over forty percent of Ethiopian children are underweight. Children who are overweight face many troubles in life as do children who are underweight. Overweight children will have heart problems and are more likely to get cancer. Children who are underweight will have diarrhea, and their bodies will not be able to fight off infection as well as someone of normal weight. Both being underweight and overweight can have some of the same health risks. Children who are over or underweight are both at a higher risk of getting diabetes. In the United States, where we see first-hand the results of the obesity epidemic, Americans are being educated about how to fight obesity. Americans are educated on the news, through healthcare professionals, and in schools. As Caulfield suggests, "money must also go toward educational and agricultural programs to abate undernutrition. "The impact of undernutrition is not as well appreciated," agrees Caulfield. Her findings emphasize the need to invest in nutrition programs globally to reduce child deaths." (Potera)
Education is a powerful tool to implement change.

Works Cited

Aberra, Yohannes. "Problems of the Solution: Intervention into Small-Scale Irrigation for Drought Proofing in the Mekele Plateau of Northern Ethiopia." The Geographical Journal 170.3 (2004): 226+. Questia. 25 Sept. 2005
<<http://www.questia.com/PM.qst?a=o&d=5007457471>>.

Alexandratos, Nikos. "Countries with Rapid Population Growth and Resource Constraints: Issues of Food, Agriculture, and Development." Population and Development Review 31.2 (2005): 237+. Questia. 25 Sept. 2005
<<http://www.questia.com/PM.qst?a=o&d=5009993019>>.

Fiebig, William. "Diversifying Sustainable Farming Systems: Behaviour Change Is Key." UN Chronicle Mar.-May 2005: 76+. Questia. 24 Sept. 2005
<<http://www.questia.com/PM.qst?a=o&d=5009683569>>.

Potera, Carol. "The Opposite of Obesity: Undernutrition Overwhelms the World's Children." Environmental Health Perspectives 112.14 (2004): 802. Questia. 24 Sept. 2005
<<http://www.questia.com/PM.qst?a=o&d=5009925178>>.

http://www.globalnews.idf.org/2004/11/obesity_epidemi.html

<http://news.bbc.co.uk/1/hi/world/africa/3969693.stm>

<http://www.thecommonwealth.org/Templates/System/LatestNews.asp?NodeID=144019>

www.unicef.org/ethiopia

www.ipanet.net/unctad/investmentguide/ethiopia/iii.htm

www.scienceinafrica.co.za/2003

www.cia.go/cia/publications/factbook/geos/et.html

<http://allAfrica.com/ethiopia/>

www.news24hours.com/News24/Africa/features/0,,2-11-37_1749628,00.htm