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Ethiopia, Factor 11: Malnutrition

Ethiopia: Improving health through proper access to nutrition

How would your life be different if you did not eat any nutritious foods? Would your home and community be different? What if you or your family member had a nutrient deficiency disease? How would that affect your lifestyle? These are the daily struggles of the people of Ethiopia. Malnutrition is the unbalanced proportion of nutrients and vitamins for a long period of time. For example, one may go to bed with a full stomach, but could still be malnourished because they haven't taken in any nutrients. Malnourished is different from under nourished, a deficiency of energy and nutrients all together, although under nourished is a form of malnutrition. The biggest focus that needs improvement in malnutrition is expecting mothers, breastfeeding mothers, infants, and children. They are the future of Ethiopia, and whether or not a child receives nutrients in these times affects the child for the rest of their life. It is a struggle to get these focus groups nutritious food because availability, access, and cost, especially in rural areas. New agricultural practices need to be enforced in rural communities so that those who live far away from nutritious food can have an easier access. Poor infrastructure prevents nutritious food from traveling. Not only are humans malnourished, but the livestock are not receiving the required vitamins and nutrients, which in turn leads to a product that is insufficient for the consumer. With an easier access of nutritious food, children would shy away from nutrient deficiency diseases such as anemia, scurvy, kwashiorkor, and osteoporosis. With a closer look on the cases and effects of malnutrition, we can hopefully find a solution.

A typical Ethiopian family includes the mother, father, extended family members, and children. Ethiopian families are quite large, sometimes containing up to twelve members. Because the families are very large, there are many roles of each family member. The authority figure is the father. The mother applies many rules and takes care of her many children; it is important that the mother teaches her children respect, obedience, and discipline at a young age, as well as religious traditions and skills necessary for adulthood. There is a lot of labor work for rural families. The women take care of children, while men work on the farm or at a job to support the family. Young girls in the home help their mothers do housework and chores; many could also spend hours a day every day fetching water. They learn how to cook, clean, and keep the family under control. Girls can get married at any age, some as young as ten years old. Women have no choice in a husband; a man can choose his wife, or it is arranged by the family. A boy is trained to work as young as age six and he helps his father in gardening, preparing land, planting, weeding, caring for animals, and other work on the farm. As an Ethiopian child, life can be very difficult. Physical punishment is used because it is believed to be effective in teaching children a lesson (Nguyen, Moses, and Gabroy).

Because refrigeration in Ethiopia is rare, many people use spices in their meats; this leads to a very spicy diet. Berbere is a special spice used to flavor and preserve food. The national food of Ethiopia, the wot, is a spicy stew made from beef, lamb, chicken, goat, lentils or chickpeas. Another common food in Ethiopia is lab, which is a soft cheese wrapped and kept cool in banana leaves. They use their hands or a flat bread called injera, which is made by the grain teff, to eat their food. The bread dough is made like sourdough bread, and it is made about once every three days. Sugar is rarely used with their spicy cooking but occasionally honey is added as a sweetener. A special treat is injera wrapped around honeycomb with honeybee grubs still inside ("Ethiopian Food, Ethiopian Cuisine"). Fruits and vegetables are not a major part of the diet, so Ethiopians lack many essential nutrients.

Not all of people of Ethiopia understand the importance of education. School was officially started in 1908, but enrollment remained low for quite some time. In 1979, twenty-two million books were donated to schools across Ethiopia, and the enrollment went from 2.5 million to 4.9 million students. Today, attending school is not a requirement. Children living in urban areas are more likely to go to school than rural children. It can be very difficult for people in rural areas to travel to because of the distance. Often times, rural families cannot afford to send their children to school because they cannot afford school supplies and children instead stay at home to do chores and work. The country's literacy and enrollment rate is increasing very slowly, but its people still lack basic reading, writing, and math skills (Nguyen, Moses, and Gabroy).

Economic statuses and environments can affect the healthcare received in Ethiopia. There is insufficient transportation, a weak infrastructure, and an inadequate number of hospitals, trained professionals, and overall assistance. The wealthy are often favored in health care, leaving a large percentage of the country neglected on basic health care needs. Almost 80% of morbidity is a result of an infectious disease that could be avoided. Nearly 94% of births take place in the home with 61% of these births being assisted by an untrained relative or friend; 5% of these home childbirths are without assistance. One in fourteen women die during pregnancy or delivery, but even if the child survives one in thirteen children die before their first birthday. One in eight Ethiopian children will die before their eighth birthday (Chaya). With the growing population, more assistance will be needed to provide a better healthcare for an improved Ethiopian lifestyle.

The agriculture industry is the key supporter of Ethiopia's economy. Coffee is an essential crop and a major export of the country. Chat, a popular leaf that is chewed, is grown and sold in the south. Sugar cane is also grown in about 13,000 hectares around the country and Ethiopia produces about 78,000 tons of sugar per year. Livestock plays a very important and necessary role in the country. There are roughly 29 million cattle, 24 million sheep, and 18 million goats dispersed throughout Ethiopia (Mengistu). State farms own a low percentage of these domestic livestock.

There are approximately seven million family farms in Ethiopia. These family farms are subsistence farms and produce just enough to support the family with the hope of making a surplus. Oxen are a major part of Ethiopia's agriculture and economy. Families are depending more and more on livestock to eat and sell because the amount of tillable land continues to decrease. The land is becoming eroded and pasture land is dwindling. As this trend continues, livestock will have to eat crop by-products. The land is failing because there is not a proper irrigation system in place and there are not many sound agricultural practices used. If traditional agriculture does not improve, the land will not be able to support the growing Ethiopian population (Anderson).

Ethiopian agricultural traditions have been unsafe and static. Undernourishment and malnutrition hold back the growth of the animal and livestock potential. Without the proper nutrition, animals can become stressed leading to deprived growth rates, reduced fertility, high mortality, and diseases. The production of food is very inefficient. Livestock are being forced to graze the same pastures as other livestock. This is causing a negative effect on the land because of overgrazing. It is also an adverse affect because different species require unique diets and care. Food productions are not the same each year which causes a random supply for food for both animals and humans. Seasonal and climate changes cause a fluctuation in the amount of food produced. Controlled breeding is hardly ever enforced, so it is hard to pinpoint if there will be a surplus or deficiency in food produced. Animals in Ethiopia are fed by-products that are poorly consumed or crop remains without proper management (Mengistu). New agriculture practices would benefit the animals health, human consumption, and agriculture economics.

Unlike the United States and many other developed countries in the world, the Ethiopian government does not have a required national minimum wage. Some businesses set their own regulations for minimum wage with the average yearly minimum wage being \$902 when converted into the United

States currency as of 2009. Ethiopia is one of the lowest earning wage countries in the world with their gross national product being \$6,353 ("Ethiopia Minimum Wage, Labor Law, and Employment Data Sheet").

Countless people in Ethiopia suffer from inadequate nutrition. Nearly 57% of children deaths are originally caused by malnutrition. Ethiopia has one of the highest rates of underweight people in the world. More than one in four women have low body mass index, leaving them very thin and lacking nutrients needed for everyday life. These people's malnutrition can be caused by numerous reasons. People in poverty cannot afford nutritious food and just eat what they can get. There are a limited number of jobs with a steady income and with an increasing population leads to many people without work. Poor infrastructure in the country also creates problems and decreases the number of already limited employment opportunities. Access to clean water and sanitation is not always available. There is also restricted access to simple health care. These are just a few of the many reasons there are many barriers to an adequate diet for Ethiopians ("Ethiopia").

One of main causes of malnutrition is food insecurity. Many Ethiopians go to bed with full stomachs, but are malnourished from lacking the proper nutrients. The people of Ethiopia do not have the proper access to nutritious food. It is challenge for those living in rural areas to access the nutrients from fruits and vegetables because they must travel great lengths on unstable roads or paths. Food quality decreases as the amount of time from the garden to the consumer's table increases. Ethiopians do not go the extra mile to get the nutritious foods because their low income limits their access. Grain crops are a major part of the diet because of availability and cost. This is why people may not be hungry, but can still be exposed to anemia, osteoporosis, scurvy, and more diseases caused by the lack of a specific nutrient. The awareness on the importance of a balanced, nutritional diet is lacking, and so are the proper ways of preparing, transporting, and storing food. Guiding Ethiopia to an efficient accessibility, availability, and knowledge about keeping a healthy diet would benefit many households and communities (Benson).

Malnutrition has an immense impact on families in Ethiopia, especially families living in the rural areas since the only food available is crops and sometimes animals. These families are not aware of the importance of receiving the fruits, vegetables, and animal products needed for a balanced diet. Children, pregnant mothers, and lactating mothers are at the biggest risk of suffering diseases form the lack of protein and vitamins. It is crucial to have a healthy diet at these stages of life. Pregnant mothers must take maximum care in their diet to build the body of the fetus, develop the brain of the infant, and benefit the body of the mother. The result of an inadequate diet leads to an increased chance of abortion and premature delivery. The infant may also have unbalanced physical and mental development shown in his or her early years. A mother must continue to have a nutritious diet because the nutrients not only benefit her, but the child that will breastfeed. Breast milk contains protein, calorie, and disease preventing chemicals that is a necessity for the child. A child that receives the proper nutrition is shielded from disease and promotes a stable growth. Many studies confirm that the food a child takes in the first 2-3 years of his or her life is the most influential. Having the access to nutritious foods affects a family's health, lifestyle, and the health of future (NUTRITION Extension Package).

The preset status of malnutrition is alarming to Ethiopia's society and future generations. People are facing serious medical conditions that could be prevented with a healthy diet. The people of Ethiopia are not aware of the importance of a balanced diet. It is becoming harder to fight off deadly diseases. Many rural areas, and some urban areas, cannot access the nutritious foods because of the cost or the availability. Society has an unbalanced physical development because of the shortage of balanced diet. Signs of a nutritional deficiency disease will appear when a body does not continuously receive the nutrients it needs, leading a severe conditions or even death. A few of the deficiencies that are common in Ethiopia are caused by the lack of protein, vitamin A, iron, and iodine. Kwashiorkor is a disease caused from the lack of protein. Its symptoms include the depigmentation and loss of hair, dry skin, and diarrhea, targeting mostly those who are under three years old. Marasmus is another disease that occurs when there

is a particular food or certain protein deficiency. The lack of vitamin A can lead to blindness over time and the failure of one's immune system to fight off disease or recover from illnesses. Vitamin C is important to prevent gum bleeding, the swelling of the bone joints, anemia, scaling of the skin, and eruption of the teeth. Children are most affected by the deficiency of vitamin D, needed for strong teeth and bones, but it is also needed to prevent osteoporosis in adulthood. Anemia occurs when the body does not receive enough iron and could be very dangerous in the hardworking lifestyle. One of the most important nutrients is iodine, even though it is needed in a very little amount. A goiter forms when the thyroid gland does not receive the recommended amount of iodine. These diseases are not as common in developed countries like the US as they are in countries like Ethiopia. Foods that contain these nutrients are not always cheap or easy for families to access. In order to prevent Ethiopia's health conditions from worsening, the people need to understand the importance of the nutrition. Ethiopia also must need assistance in organizing a systematic way of accessing these balanced diets for future generations (NUTRITION Extension Package).

Understanding the issues of Ethiopia has been the target of many scientists, and that has helped the country improve its knowledge of proper nutrition. In just eleven years, Ethiopia has reduced mortality and stunting for children under five years old. An estimated 139 deaths per 100 live births has fallen to 77 deaths per 1,000. The rates of stunted children under five years old have also decreased in these years, from 57% to 44%. Although there have been improvements, it is still an intergenerational cycle of poor nutrition, illness, and poverty causing a deflation in the entire economic infrastructure. If the people of Ethiopia had access to the proper nutrition, healthcare would not be as compulsory, therefore freeing resources. Many people living in rural communities do not have the availability of a nutritious diet, so they become ill. They also do not have admittance to the high-priced healthcare, leading to poverty. This just leads to an endless cycle to unaffordable foods, unattainable healthcare, and death. Although this cycle is difficult to directly fix, researchers and statistics have brought a new understanding to improving a long-term problem in a few short years. The first one thousand days, including days in the womb, of a child's life are the most nutrient required days of one's entire life. Recent studies link malnutrition the cause of nutritional deficiencies, impaired brain development, stunted growth, and reduced performance in school. Poor growth in the early years of life followed could increase the risk of heart diseases, stroke, hypertension, diabetes, and many more diseases. Evidence supports that fixing the short-term and the long-term effects of malnutrition will improve the health of families, communities, and the entire nation ("IMPROVING CHILD NUTRITION).

The government of Ethiopia started a program in 2008 called the National Nutrition Programme (NNP). This organization combines its nutritional services into one comprehensive strategy. The NNP focused on food aid and humanitarian assistance until recently. Now they address the immediate and underlying causes of malnutrition in many communities. The NNP is attacking malnutrition by covering many sources. They cover seven million people in the communities with the highest poverty. The organization strives to improve infant feeding practices and provide micronutrient supplementation. Packages of helpful health services, like insecticide-treated mosquito nets and pneumonia treatment, have been handed out for free. These actions have been allied with the government's Food Security Strategy. A major component of the NNP is the Community Based Nutrition Programme, which focuses on strengthens the nutrition for the children under two years old. The Community Based Nutrition Programme develops communities by educating them about the causes and actions needed to improve the use of external resources. Health services and extension workers have brought new nutrition interventions to assist the community in a healthier lifestyle. This program has grown from 39 districts in 2008, to 228 districts in 2012 (IMPROVING CHILD NUTRITION).

Average people in America can help eliminate malnutrition in Ethiopia by supporting trustworthy benefit groups. Action Against Hunger is an organization dedicated to improving nutrition, water sanitations, and economic infrastructure in nearly 40 countries, including Ethiopia. Their team of 379 employees has

helped 163,269 people in Ethiopia alone: 28,989 people received nutritional support, 67,146 people gained access to safe water and sanitation, and 68,734 people gained economic self-sufficiency. 22,000 children were treated for severe malnutrition in 2012. By supporting this organization, it can put an end to the cycle of poverty, and lead Ethiopia to a new era (“Ethiopia”).

A nutritious diet will change the lifestyle of millions of people living in this country. If attaining nutritious food was more affordable and attainable for rural families, it would decrease the number of stunted children. This would result in a better education for children and a healthier life as an adult. A balanced diet would also allow mothers to provide the essential nutrients for an infant through breastfeeding. Access to healthy would reduce the number of nutrient deficiencies; therefore the morbidity rates will decrease immensely. With fewer illnesses, healthcare could bring their focus and resources in a better way. Malnutrition is caused by poverty, poor infrastructure, restrictions to health care, and lack of availability to proper water and sanitation services. Enhancements could create a healthier lifestyle and help services become more available across the country. Helping Ethiopia achieve the goal of a healthier lifestyle would benefit many families, communities, the country, and even the world.

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