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Kenya: Combating HIV and Aids

Sometimes, the problems in other countries seem so distant. Every once in a while a disturbing story comes on the news, and people pay attention. But most of the time, wealthy people forget the conditions that less fortunate people in the world have to live with. The comfortable lifestyles that many Americans enjoy make it difficult for them to understand what the rest of the world is like. There is nothing wrong with chasing the American Dream and taking every opportunity. However, privileged Americans should be aware that many countries, like Kenya, are less fortunate, and they need help. For me, traveling to the impoverished countries of Nicaragua, and later Guatemala in 2014, 2015 respectively, was an eye-opening experience that helped me see a connection between worldwide poverty, disease and food insecurity. These trips gave me a new perspective on how fortunate I am to live without the immediate fear of going hungry or living in poverty. At some point, I hope that all of us will be able to stop idly hearing about the struggles of other far away countries on the news and we will have the courage to do what we can to try and stop problems such as HIV/AIDS epidemics and world hunger from continuing.

1. Kenyan Living

Close to 46 million people live in Kenya, a country in East Africa that borders Somalia and the Indian Ocean. Kenya is a developing country, and like many developing countries, the majority of its population are young people. The median age in Kenya, 19.3 years, is extremely young compared to the United Sates, with ages 0-14 consisting of 42% of the total population. The median age in Kenya is an indicator of the reliance that young, unemployed children, have on their parents to provide food for them. When middle aged Kenyans are not able to provide money and food for their families, school aged Kenyans and elderly Kenyans struggle to nourish their bodies more than they would in other countries because of the high dependency ratio. In Kenya, the amount of people who would be considered middle class is much smaller than in the United States. There are some very rich people that live in Kenya, such as celebrities and politicians, however, the vast majority of the people live below the poverty line and earn less than one U.S. dollar each day. Living below the poverty line is one reason why many families are food insecure in Kenya. Creating a more opportunistic middle class is extremely important to combat hunger (cia.gov).

Kenyans traditionally have large families comprising of six people: a father, mother and four children. Seventy- five percent of Kenyans live in rural East Kenya and rely on growing food off their own land to survive. These small, subsistence farmers are most likely to grow corn, potatoes, and beans. Even though many Kenyans farm for a living, some of them have little formal training on farming methods and they cannot afford to buy farming equipment or important crop fertilizers. As a result of a lack of knowledge and resources, Kenyans struggle to farm enough food to nourish their families. Subsistence farmers usually use all the food that they have to try to keep their families fed and have very little food left over to sell for a profit. Because so many Kenyans are unable to make a profit with their farmland, they are unable to move to a higher social class and, therefore, cannot afford life necessities such as healthcare, unless treatment is given to them for free by organizations like the Moi Hospital in Eldoret, Kenya (sciencekids.co.nz, cia.gov).

2. Set Backs

Low life expectancy at birth of 63.77 years in Kenya is an accurate indicator of the struggles Kenya has as a nation. 63.77 years is only the 148th best life expectancy compared to other countries in the world. Although many Kenyans receive education, and 84% of the population is literate, the largest facet of the

Kenyan economy is currently agriculture. Few Kenyans that receive an education end up working in jobs aside from agriculture either because they would need to get a more in depth education or because they want to continue their ancestors' tradition of being farmers. Having a large number of farmers would not be a problem in the nation aside from the fact that many of them do not understand how to farm properly. Problems with Kenyan farming methods may include: not selecting the proper site, failure to evenly distribute seeds, failure to kill weeds, failure to plant seed at the correct depth, failure to thin crops, failure to minimize rain runoff, failure to harvest at the correct time, failure to rotate crops each year, failure to plant nitrogen fixating legumes, and there are many other issues (Dryden, Grant). The Kenyan environment can also contribute to a lack of farming success when there are droughts and floods. All of these things contribute to insignificant yields which prolong the problems of food insecurity and poverty (cia.gov).

Others problems such as political unrest, violence and disease have prevented Kenya from achieving food security for its citizens. Political unrest has historically caused problems in Kenya, especially during elections. There was an exceptional example of internal instability in Kenya during the 2007 elections. The post -election violence damaged the school system, because schools were destroyed or turned into camps for internally displaced persons. The Kenyan government is also responsible for preventing the spread of a Somalian militant group called Al Shabbab. This group has an allegiance with the Al-Qaeda terrorist group and like them, has a sworn jihad against the enemies of Islam. The Kenyan government spends many resources each year to prevent violence from spreading across the Kenyan border. Both of these instances of violence have prevented the Kenyan government from using their resources to help stop the chronic hunger that many Kenyans face on a day to day basis. One additional problem is that the government is unequipped to confront the spread of HIV and AIDS in Kenya. HIV is an extremely poignant problem in Kenya that must be stopped in order for families to be food secure (cia.gov).

3. Improving food security by stopping HIV in Kenya

When trying to significantly decrease food insecurity in Kenya, it is important to understand that there are several interlocking issues that each contribute to the food insecurity problem. In fact, Cleophas Chesoli, AMPATH's manager of social work, referred to poverty, disease and hunger as a "three-headed monster" that cannot be defeated by cutting off just one of the heads. He believes that stopping HIV is an important task because it is necessary to allow Kenyans to begin stopping food insecurity and poverty as well (journalism.indiana.edu).

Here is an example of HIV causing food insecurity and poverty. Kenya is very dependent on the middle age group and these adults are usually responsible for providing food for their families. When middle aged adults show symptoms of HIV, their bodies are not healthy enough to work. Adults that cannot work are unable to make money and the result is poverty for their families. Because of poverty, these families are unable to afford nutritious food, and thusly, become food insecure. The children that live in this family are much less likely to receive a good education because of their poverty, and because of this, they will have very little chance to improve their lives in the future. As seen from this example, stopping HIV could help prevent a chain reaction of poverty and food insecurity in Kenya. That is why HIV must be stopped.

Organizations like AMPATH understand that if they want to establish food security in Kenya they must also attempt to find solutions to poverty and infectious disease. Although trying to solve all of these problems at once can seem like a daunting task, sometimes, by finding a solution to one of the problems, all of the others get a little less severe. In the case of HIV, finding a way to treat and prevent HIV allows families to stick together. HIV treatment prevents a husband from abandoning his wife after discovering that she has HIV. When couples stay together they are able to earn a higher income, helping them to remain above the poverty level and to have enough money to afford nutritious food. Once again, in this instance, treating or preventing HIV in a family allows them to avoid poverty and food insecurity in their future (journalism.indiana.edu).

Just as HIV leads to poverty, in the same way, poverty leads directly to HIV. One example of this is that poverty causes women to sell their bodies to men because they are poor and they need more money to be able to survive. These women are very vulnerable to getting HIV from the men that they are sexually servicing and then they can spread HIV to other sex partners. This example continues to build upon the idea that poverty, disease and hunger are issues that must be dealt with in small levels at the same time. Organizations such as AMPATH have made a large difference in the lives of Kenyans because they understand how poverty, HIV and food security are all related to one another. (journalism.indiana.edu).

4. Behaviors and customs make HIV, and later food insecurity, an issue in Kenya

Cultural stigmas are at the heart of the HIV crisis in Kenya. An important aspect of treating HIV and, in turn, stopping food insecurity, is understanding the culture of Kenya so that destructive social behaviors can be prevented.

Kenyan's have struggled with HIV because they are unwilling to change their traditional gender roles. Dr. Mabel Nangami, a professor at Moi University's School of Public Health, pointed to polygamy as a cause of HIV spreading. In a polygamous marriage, also known as a marriage with multiple members, one member of the marriage that already has the disease could spread the disease to the other members of the marriage through sexual relations. Dr. Nangami later said that that even though the westernization of Africa has caused polygamy to be less popular, boys are still encouraged to be "sexually aggressive" and there is a notion that you are not a man unless you can "keep three women" (Quigley pg. 39).

Cleophas Chesoli, AMPATH's manager of social work, commented on the importance of having men tested for HIV. He noticed that "80 percent women" and only "20 percent men" come to be tested. Chesoli thinks that the social aspect is what prevents men from being tested. HIV is commonly associated with sinful behavior and people in Kenya forget that the spread HIV is not solely through sexual relations; it can also spread from mother-to-child transmission at birth. Many men are concerned with how their friends and family will treat them if they are found to be HIV positive. Unfortunately, if the man does have HIV and chooses not to be tested, he puts his wife in danger of getting the virus and he will not be able to get antiretroviral treatment before it is too late. Women are generally tested for HIV during childbirth, so having women tested is less of a problem (journalism.indiana.edu).

Kenya has historically struggled with HIV because the people do not trust that doctors or medicine can help them. Dr. Joe Mamlin, who worked in Indiana University's medical school Division of General Internal Medicine, was working at the Moi hospital in Kenya when a 14 year old boy came to be treated. The boy had a temperature of 105 degrees caused by typhoid fever. The next morning, instead of being in the hospital, Dr. Mamlin found the boy in a windowless room left to die. The boy's parents apparently thought that there was no hope for the boy to survive so they left him to die. In, the boy's case, he had a simple fever and completely recovered after being given blood and antibiotics. Dr. Mamlin later wrote to sum up his frustrations, "When a patient is acutely ill, the family does not even give us (the hospital) a chance. They pick him up and carry him home because the taxi fare is only 40 to 60 afghanis (53-78 cents), but if he dies in the hospital, the taxi fare for a dead person is 2,000 to 3,000 afghanis (\$25-\$30)" (Quigley pg. 28). As seen from this example, the mistrust of doctors, general ignorance of medicine and sickness, and belief in false superstitions have made treating HIV difficult in Kenya.

5. What are solutions to HIV in Kenya and the resulting impact on food insecurity?

As stated before, in order to get the best results in Kenya, several observations must be made. People trying to find a solution must realize the interconnectedness of HIV, poverty and disease and they must also understand the culture of Kenyans. To do this, those wishing to provide aide must be living fulltime in Kenya and implement their own solution to each of the "three headed monsters". Local nongovernment organizations are best equipped to serve this purpose. HIV itself has a somewhat simple

solution- antiretroviral therapy, however providing an environment for Kenyans where they can afford medications, education and food, a much more daunting challenge.

One of the most successful nongovernment organizations in Kenya is known as AMPATH, the Academic Model for Prevention and Treatment of HIV/AIDS. AMPATH was started as a partnership between Indiana University and Moi University in Kenya to specifically treat HIV. In their two decades of work, AMPATH has equipped and built hospitals that have improved the health of Kenyans. This, and farming education, has led to an improvement of Kenya's standard of living. (journalism.indiana.edu).

There are several philosophies that make AMPATH a successful NGO. First, AMPATH practices what is called a "hand up" policy. This means that they focus on empowering people to solve their own problems instead of simply giving resources to needy Kenyans and refusing to educate them. This strategy allows the Kenyans effected by AMPATH to begin to live sustainable lifestyles and to not develop a dependence on foreign aid. One way that AMPATH provides sustainability via education is by having workers come to the AMPATH clinics to receive education. In some instances, a person who is being treated for HIV may still be dealing with enough symptoms that it is impossible for them to return to their families. During this time, AMPATH will sometimes employ these people to work on their farms and in exchange for their labor be taught proper farming techniques.

A second way to provide sustainability is to go directly to Kenyan farms. Mr. Kirk Morehead, an employee at Dow AgroSciences currently working at an AMPATH site in Kenya, got to experience AMPATH's hand up policy first hand. He first noted the importance of a hand up policy saying that it is extremely difficult to live sustainably as a Kenyan when you are sick, hungry, and uneducated. AMPATH helps to give Kenyans health and then they figure out a nutritional diet for them because some drugs are required to be taken on a full stomach. The hardest area to accomplish is in educating Kenyans so that they can grow gardens and crops and sustain themselves. Currently, AMPATH provides a hand up in sustainability via education by the formation of Safety Nets. Safety Nets go to villages where AMPATH has clinics in fifty different communities. When they are at these clinics, members of Safety Net, position social workers to go to the Kenyan people on their farms and educate them about proper nutrition. There are also people at the clinics that specialize in production agriculture and they use their knowledge to educate Kenyans on how to improve their farming practices. This gained knowledge allows Kenyans to increase the yields on their farms and develop a sustainable lifestyle.

In other words, a sustainable lifestyle is almost synonymous with what the typical person views the middle class as; a sustainable living situation. AMPATH's value of the hand up policy gives Kenyans an opportunity to build wealth (because of their new education), afford healthcare and more future education, and to have the financial ability to avoid potentially dangerous professions such as prostitution. A larger middle class would be extremely helpful for the whole country of Kenya as discussed earlier. (journalism.indiana.edu).

While AMPATH is an extremely important NGO in Kenya, they are not alone. Many NGOs along with the One Acre Project and CABI Plantwise are also important contributors to the goal of providing food security. Privately owned businesses such as Dow Agro Sciences also have provided some helpful aide. The One Acre Project is an NGO that focuses almost all of its resources on the smallholder farms in Kenya. The most common profession in Kenya is farming and most of these are small farms that range from 1-3 acres. The one acre specializes in financing for farm inputs, distribution of seed and fertilizer, training on agricultural techniques and market facilitation to maximize profits from harvest sales (oneacrefund.org). Plantwise is an organization the specially works to help farmers lose less of what they grow to plant health problems (plantwise.org). Finally, Dow Agro Sciences, much like the one acre fund, has also started farmer groups in Kenya to help stabilize the price of crops and make purchasing seed easier for farmers.

6. Current State of HIV/AIDS and its effect on food security

Through the combined efforts of NGOs, positive changes have occurred in Kenya. They have been able to educate Kenyans on how the disease HIV is spread and can be prevented (journalism.indiana.edu). They have instructed the Kenyans on how to share this information with their neighbors. They have been able to cross cultural barriers and convince Kenyans that there can be consequences to being too sexually active. They have helped to resolve some of the dangerous myths that Kenyans have about the HIV virus (Quigley pg. 48). They have been able to provide treatment for 80% of new mothers at the Moi Hospital, and because of this they shrank the number of mother to child transmissions of HIV from 45% down to less than 3% (ampathkenya.org). They have been able to lower the cost of antiretroviral treatment from being \$500 each month for each patient in 2000, to now being a much more affordable \$25 each month for each patient. They also provide employment to some of their patients who are too sick to work otherwise (journalism.indiana.edu).

The statistics of HIV have drastically improved during recent years. In 2013, Kenya had the fourth largest epidemic in the world with 1.6 million people living with HIV. That same year roughly 58,000 people died from AIDS-related illnesses. The good news for Kenya is that the number of AIDS- related illnesses dropped by 32% between 2009 and 2013 (avert.org). In 2014 it was estimated that 1.4 million people were living with HIV/AIDS and 33,000 people died from the disease. Fifteen years ago almost 35% of the population in Kenya had HIV, and many of them would end up dying from it. Today, less than 15% of the Kenyan population has HIV thanks to the efforts of NGO's. The NGO AMPATH has benefited more than 115,000 clients, and this, combined with the efforts of the partnership with other NGOs and privately owned businesses, has been able to help provide food security for thousands of Kenyans that would have otherwise been food insecure (cia.gov).

7. Concluding Thoughts

To solve a problem as formidable as world hunger there are many factors to consider. Providing food for a growing population is not solely about equipping farmers to increase their yield. In some cases, the concern is not simply the quantity of food, but rather with social and economic issues that prevent families from buying food. As technology has advanced, the per capita food availability has risen from about 2220 kcal/person/day in the early 1960s to 2790 kcal/person/day in 2006-08. Developing countries have also recorded a leap from 1850 kcal/person/day to over 2640 kcal/person/day (worldhunger.org). Regardless of this advancement, almost one billion people go to bed hungry every night (worldfoodprize.org).

Thanks to NGO's, food security has been greatly improved in Kenya due in part to the treatment and prevention of HIV. While food security is far from perfect in Kenya, in many ways Kenya is a success story of how to solve disease related problems that lead to food insecurity. My recommendation is that world leaders look the ways that each NGO has been successful and develop ways that NGOs can be improved and cooperate with each other. In my opinion, there has been success in Kenya when organizations use a hand up policy instead of a dependency policy, understanding Kenyan culture is valued, and multiple problems such as food insecurity and disease are addressed in small ways all at the same time. With combined efforts from Kenyans, Americans, and many other kind-hearted people across the globe, I believe that solutions can be found to provide food security for families in Kenya and in other food insecure nations.

Resources

- About Plantwise." *About Plantwise*. N.p., n.d. Web. 19 July 2016. https://www.plantwise.org/about-plantwise/.
- Central Intelligence Agency. Central Intelligence Agency, n.d. Web. 28 Feb. 2016.

"Country Facts." Kenya Facts for Kids. Science Kids, 1 Feb. 2016. Web. 28 Feb. 2016.

- Dryden, Grant. Farming God's Way. N.p.: n.p., n.d. Print.
- "HIV/AIDS Prevention and Adherence." *Communicable Diseases / AMPATH-Kenya*. N.p., n.d. Web. 28 Feb. 2016.
- Kratzner, Christina, and Rosebella Apollo. "Reporting on HIV/Aids in Africa." Rose's Thorns: Woman's Story Reflects Stigma of HIV. Indiana University Bloomington, n.d. Web. 28 Feb. 2016. "80 percent women", "20 percent men", "three headed monster", "the root cause"
- "Program Model." One Acre Fund. N.p., n.d. Web. 19 July 2016. https://www.oneacrefund.org/our-approach/program-model>.
- Quigley, Fran. Walking Together, Walking Far: How a U.S. and African Medical School Partnership Is
 Winning the Fight against HIV/AIDS. Bloomington: Indiana UP, 2009. Print. "sexually
 aggressive", "keep three women" page 39. "When a patient is acutely ill, the family does not even give us (the hospital) a chance. They pick him up and carry him home because the taxi fare is only 40 to 60 afghanis (53-78 cents), but if he dies in the hospital, the taxi fare for a dead person is
 2,000 to 3,000 afghanis (\$25-\$30)" page 28
- "2015 World Hunger and Poverty Facts and Statistics by WHES." 2015 World Hunger and Poverty Facts and Statistics by WHES. N.p., 25 Nov. 2015. Web. 28 Feb. 2016.

"What Is AIDS/HIV? Facts, Statistics, and Causes." WebMD. WebMD, n.d. Web. 28 Feb. 2016.

"The World Food Prize." Purdue University, n.d. Web. 28 Feb. 2016.

"HIV in Kenya." Message to the author. 16 Mar. 2016. E-mail.