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Zambia, Factor 12: Human Diseases

### **Zambia: HIV/AIDS**

Tucked in Sub-Saharan Africa, Zambia has a growing population of about 14,638,505 people (cia.gov July 2014). Zambia is the highest producer of copper in Africa, making copper a major industry within their economy, alongside of agriculture, found mostly in the northwest (ruralpovertyportal.org). However, following a sharp decline in copper earnings, the contribution of the agricultural sector to GDP has increased (foa.org) with about 85% of the population holding jobs in agriculture with only 6% holding jobs in industry (cia.gov). Even with the prevalence of agriculture, it is reported that around 47.4% of the population is starving in Zambia. According to Global citizen.org, Zambia is number ten on the most undernourished countries list. In rural parts of the country about 83% of the inhabitants are labeled poor and 71% of them are labeled extremely poor (ruralpovertyportal.org). With these high poverty rates, food insecurity becomes a common struggle in a Zambian household.

An average day for a farmer in Zambia consists of tending to their family-run farm. With the absence of market incentives to encourage a fundamental shift, a majority of farms are still subsistence farms (Global Citizen) even though only 15% of arable land is cultivated. Unfortunately, small farms do not have the funds to expand and hire to make the homestead a profitable business (Mail and Guardian). Only 1% of small farmers have access to electricity and just 28% have access to a public water supply, making irrigation all but a dream for many (Mail and Guardian) forcing women and their daughters spend from one to five hours just getting fresh water. Additionally, Zambia's food security challenges are worsened by a high dependence on rain-fed agriculture (Global Citizen) with common droughts and unpredictable storms from October to April, having a steady flow and growth of these products becomes nearly impossible. Farmers grow corn, sorghum, rice, peanuts, sunflower seeds, vegetables, flowers, tobacco, cotton, sugarcane, cassava, coffee (cia.org). Their average diet is composed mainly of cereals, predominantly maize, starchy roots and, to a lesser extent, fruits, and vegetables. Cereals provide almost two-thirds of the dietary energy supply (Fao.org). All though with outside complications such as seed quality, unpredictable weather and soil quality, these plants may not be able to provide. This forces most men move into more urban areas to look for work. Children, where available, go to a primary school, but 47% of those enrolled in school do not complete the primary cycle ([www.unicef.org](http://www.unicef.org)). This sad statistic is due to the need for children to get a job for money or helping out on the family farm, because of the absence of a father or a sick family member. In Zambia, one or more members are chronically ill, generally with HIV/AIDS (Rural Portal).

One of the major threats to the Zambian way of life is the disease of HIV/AIDS, which over 1,106,400 people are infected with and many more are effected by (cia.gov). The definition of HIV/AIDS is Human Immunodeficiency Virus, according to Aids.gov. HIV then moves to its final stage AIDS or Acquired Immunodeficiency Syndrome, and although it is a virus similar to the average flu and cold, the body is not able to fight off this disease. In the world, about 35 million people are infected, but 71% of all people who are living with HIV live in sub-Saharan Africa (aids.gov). Zambia is smack-dab in the middle! The majority of those who have HIV/AIDS do not have access to treatment or the finances to pay for it, and even if they can, treatment can only prolong life and does not cure someone of this disease. HIV can often live in someone without them being aware; symptoms can be mistaken for a terrible cold, making most people oblivious until HIV moves to the AIDS stage. Without a strong immune system, people with AIDS are more likely to contract many other diseases only killing them faster. This disease slowly breaks down the one thing that should protect the human body, the immune system. This disease is passed mostly through the sharing of bodily fluids and is not passed by air or water. Sexual intercourse, the sharing of syringes, rinse water, and other equipment used for injecting drugs, breastfeeding from an HIV

positive mother, and the passing of blood from a HIV positive wound to another are all ways one can contract this devastating disease.

Today in Zambia, around one in seven adults have the HIV/AIDS virus. Every day 115 new people become infected in this country, and as of 2012, Zambia was number fourteen in the world with the highest death rates from the HIV/AIDS virus. In Zambia, there is an average 0.07 physicians/1,000 population, making even the least of intimidating diseases and viruses still a threat to the community (cia.gov 2010). Without the needed doctors, even those with simple diseases could have symptoms that worsen to the extreme. In relation to the HIV/AIDS problem in Zambia, this could be detrimental to those suffering with this disease due to the fact that HIV makes one more susceptible to disease, along with added pressure to a breaking down immune system which can quicken the effects of HIV into AIDS. AIDS has not just affected those in the rural community, but also has spread to the urban parts of the country (avert.org). HIV/AIDS has had a lasting effect on everyone in Zambia, but most notably the young women between the ages of 15-24. They have an HIV prevalence that is more than twice that of men in this age category (avert.org). Within the culture of Zambia, generations of women have few rights and live under the notion that they cannot refuse their husbands of sex or insist on the use of a condom. Also in a Zambian survey, around 15% of women reported forced sex, though this number could be higher because of the fact that some women may not report a rape (avert.org). Young girls also face a major threat of rape and receiving AIDS because of a common myth called the "Virgin Cure." This urban tale says that if someone has sexual intercourse with a virgin, it will cure the HIV/AIDS virus. Women whose husbands are migrant workers are especially vulnerable to HIV/AIDS, as their spouses may have other sexual partners. Similarly, some women may engage in transactional sex to earn money or other commodities in times of economic insecurity (un.org). In the end, gender and culture barriers in Zambia are causing more infection and earlier death in one of the country's most valuable resources, their people.

What does the problem with AIDS in Zambia have to do with food insecurity? Without the proper education and precautions, this dangerous virus can have a major effect on the individual, the family, and the community. It can lead to an increase of lost jobs in the work force, crippling the company. For the standard family farm, losing the little work they have and forcing the rest of the family to double up on jobs is running the risk of failed crops. Furthermore, when malnutrition comes into play, it helps to speed up the process of HIV because the already collapsing immune system is deprived of the nutrition it needs. In contrast to other diseases, AIDS kills mostly members of the productive age group -ages 15-49 years old. AIDS cuts productivity as more people become ill and as more time has to be devoted to caring for the sick and for funeral rituals (un.org). Alongside this statistic, having people unaware of their diagnosis or infection, the virus can cause the disease to spread without the Zambians even knowing. One of Zambia's largest mining companies, Konkolahad, has its workers submit themselves to an anonymous HIV test. With the results, they found that 8,532 employees were infected with HIV (avert.org). This would mean that these 8,532 workers would later be unable to work due to loss of strength and energy. Also, assuming that all these workers came from the same proximity in Zambia, the fact that there are just around 2 beds for every 1,000 in a population means there might be just over 8 hospital beds on average. This is definitely not enough for the eight thousand HIV-infected people. The problem will further when these companies have to find more workers and retrain them. Without proper prevention, education, and promotion of testing in Zambia, the food insecurity will not get better, leaving not only people to die from HIV/AIDS virus, but also affect their family and community irreversibly.

#### Solution 1: Prevention of HIV/AIDS

The best way to help keep the HIV/AIDS virus contained is to control it and help prevent its spread across the country of Zambia. People are a country's most useful resource and an extreme loss of them could send the economy plummeting. Helping to keep the virus from spreading can help ensure each family has members who are strong and healthy, allowing them the ability to provide and take stress away from those family members already infected. Zambia has agricultural rich land, but only 15% of this land is

being farmed (Mail and Guardian). Relieving the pressure of medical bills and treatment for the sick could help each of these families grow their farms out of subsidized farming. This would not only help the family, but also Zambia's economy by creating a larger market. Therefore, in order to prevent this virus from spreading farther and infecting the much-needed work force, families in Zambia must start using the following common practices.

#### 1. Condoms

Condoms are one of the best ways to prevent the HIV/AIDS virus from spreading and they are listed first on ways of prevention according to CDC.gov. This gives the safest option for having sexual intercourse without the other person contracting the virus. One of the problems in Zambia is that condoms are frowned upon, despite the fact of the successfulness of them as an AIDS prevention tool. There are many reasons for this; one being that the Catholic Church frowns upon them as they promote an unclean life style, even though condoms help counteract common diseases like HIV/AIDS and other STDs that can spread across a community. Some officials in Zambia have even spoken out about why they should not use condoms. One of the past presidents in Zambia has been quoted to say, "I don't believe in condoms myself because it is a sign of weak morals on the part of the user." Although saving yourself for marriage is a safe and great moral to live by, it is highly unrealistic. Even in marriage, the risks can be high for those whose husbands are migrant workers, as their spouses may have other sexual partners (un.org). This makes the use of condoms important because of the fact that the husband could contract HIV/AIDS and give it to his wife if he does not use a condom when he is with the other women. This would then cause a major strain on the family because the mother and father have kids or other family members who depend on them for food and income. They will start to have no access to these necessities as the virus progresses and they are no longer able to work. In addition, many women are not taught to refuse sex from their husbands and cannot demand the use of condoms because of their few rights, leading more women to getting the virus. One of the other major obstacles is that, to the rural worker, condoms may not be commonly available. More recently, total condom distribution has been dropping in Zambia, particularly in non-health facilities where condom distribution dropped by 46% in 2007 and then a further 10 percent in 2008 (avert.org). Only 1 in 10 men and women who engaged in higher risk sex (those who had more than one sexual partner in the last 12 months) reported using a condom with their last partner (avert.org). Without people being able to have access to condoms, we are taking away one of the few tools helping to prevent the multiplying of this disease in Zambia. Currently there are pharmacies in major towns and cities and very few of the rural public has access to them (<http://www.expatarrivals.com/zambia/healthcare-in-zambia>). If we started to publicize condoms and sell them in bulk in a majority of the market places around the country it would create access for more people. With programs like "CARE" and people like Milenda Gates help we can help bring contraceptives to those without access. (<http://www.globalization101.org/the-battle-over-birth-control-for-developing-nations/>).

#### 2. HIV Positive Mothers Not Breast Feeding

Currently, mothers have about a one in four chance of passing the HIV virus to their children through childbirth. However, there are drugs like antiretroviral drugs that lower the chances of the virus passing from mother to baby to less than 2 percent (aids.gov). This is a great advance in AIDS technology, but can be unavailable for people in Zambia because of the fact that they cannot afford it. Yet, with a 75% chance that a child is not born with HIV, they will definitely get the virus if the HIV positive mother breastfeeds the child. The milk is a carrier of the HIV virus, making the child most definitely HIV positive. Having HIV mothers not breast-feed their children helps give hope that these babies can then live a healthy life and not shorten their years on this earth.

## Solution 2: Education of the Zambian Community

The best way to help people who are infected or can become infected is to educate them. We all know knowledge is power and the more you know, the better you can protect yourself. The ignorance of people not knowing the facts can spread the virus around a community. One of the major misconceptions that has spread across Zambia is the “Virgin Cure.” This urban tale says that having sexual intercourse with a virgin is an effective way to help get rid of the HIV/AIDS virus. This is extremely wrong because having sexual intercourse with anyone, virgin or not, will not cure this virus, but just spread it further. Yet many people believe this because they do not fully understand the virus of HIV/AIDS. Also without education, the new generations in Zambia will not understand the deadly threat that HIV/AIDS holds. Around one third of young people, ages 15-24, have comprehensive HIV/AIDS knowledge in Zambia and sadly, more than twice the amount women compared to men in this age group are more likely to get AIDS (avert.org). With women not having a chance to go to a proper school, but rather being forced to help more with caregiving, being a mother makes them even less likely to be properly educated, especially in regards to the threat of HIV/AIDS (un.org). Yet, even in school, students are not being accurately educated on HIV/AIDS. In a government report, it was shown that two thirds of the teachers had knowledge on HIV/AIDS, but many of them did not add this into the curriculum or use this knowledge in the classroom (avert.org). This is leaving less than 17% of 15-24 year olds with education on the virus that is sickening their country. We must be able to have these teachers help students going into the world know that HIV/AIDS can't be cured, but still have many ways to prevent it. All the ways to prevent and be tested will help these students stop the spreading of this disease, helping more people live and grow Zambia. Only 1 in 10 men and women who engaged in higher risk sex (those who had more than one sexual partner in the last 12 months) reported using a condom with their last partner (avert.org). If we can teach these Zambians about the importance of the use of condoms and the effectiveness of them, we could help stop AIDS (avert.org). In 2012, there was a program started call ‘U-Report’ that allowed people to text in questions about the HIV/AIDS virus, as well as helped educate the community (avert.org). However, in a survey done by SMS News, it was shown that only 22% of Zambians have and use mobile phones to reach news and information. Therefore, spreading the learning about the HIV/AIDS virus to more rural areas can help prevent and halt the increasing of infection. If ‘U Report’ starts to expand out and help those most in need of information in the rural parts of Zambia, we can help make sure everyone will know how to protect himself or herself. With those who do not have a phone, teachers in primary schools should implement HIV/AIDS education in their curriculum, so the younger generation will be fully aware of the threats and misconceptions about AIDS.

## Solution 3: Frequent Testing and Promotion of Testing

One of the worst disadvantages of the HIV/AIDS virus is the fact that the original symptoms are quite flu-like and can be misinterpreted until the virus turns into AIDS. Furthermore, the original telling symptoms are not necessarily going to show; some people do not have any symptoms until the virus has reached the AIDS stage. This can mean that people will not know they have HIV/AIDS, which leads to unknowingly spreading this to others in the community, creating a deadly domino effect. In 2012, there were around 1,106,400 people living with HIV/AIDS in Zambia, but this number is higher because of the amount of people unknowingly spreading the virus (cia.org). The more people that can know if they have HIV, the better choices they are going to make, enabling them to protect others. As I have said before, less people infected will save lives in the work force and in the home. Only 15% of Zambian adults, ages 15-49, received a test in the last twelve months and know their HIV status (avert.org). If they are not tested early enough, they cannot get enough treatment or proper treatment for their stage of HIV. Without this treatment, life expectancy will drop. Along with this testing, the amount of facilities for testing and counseling in Zambia has increased to above 1,500 in 2010 (avert.org). Nevertheless, the number of testing done for HIV went down 200,000 people less than in 2009 (avert.org). Improvements in work and mental health status were identified as potential pathways through which treatment may improve food security of Zambia (Role of ART). Zambia needs to help encouraging people to be tested so they know

their status, helping to prevent this spreading throughout the country. Even though Zambia has a universal health care system only 50% of those living in rural areas have access to a facility (<http://www.expatarivals.com/zambia/healthcare-in-zambia>). If we could start a program to bring a three-day clinic to villages around the country we could make sure people have access to test and know their status. With more people knowing if they are HIV/AIDS positive, they will be better able to make proper plans for their individual futures and get appropriate assistance for counseling to help prolong their life. The resources are there in Zambia for the betterment of these people, but we need to come together and show what a difference even knowing if one has HIV can make.

With Zambia being number eleven in the world with the most people living with the HIV/AIDS virus, it causes a major strain on the economy of the family, community, and country. Having the extension of AIDS across the country is crippling to the workforce of the Zambian people. Already, 85% of the Zambian work force in agriculture has a dicey livelihood because of the common droughts and unpredictable rainstorms ([cia.gov](http://cia.gov)). This statistic goes hand and hand with the fact that someone in the family sick from HIV/AIDS makes the work load too much for others in the family. This causes major strain and pressure to make ends meet, especially when a majority of the family owned substance farms' crops are not being planted or harvested correctly, causing money and resources for food to go straight out the window. This is leading to the widespread sale and slaughter of livestock to support the sick and provide food for mourners at funerals, which jeopardizes the livestock industry, as well as communities' long-term food security and survival options ([un.org](http://un.org)). According to [Avent.org](http://Avent.org), this has happened before in Zambia. AIDS is believed to have made a major contribution to the food shortages that hit Zambia in 2002, which were declared a national emergency ([Avent.org](http://Avent.org)). When an event as serious as this has a direct correlation with HIV/AIDS, it proves that helping with the virus in Zambia will also help with the food security issue. Many of the poorest people live in households headed by women where one or more members are chronically ill, generally with HIV/AIDS ([rural portal](http://rural.portal)). With promotion of the use of condoms and enabling the right for women to be responsible for their own bodies, we can help keep this from spreading. With proper education to the Zambia's youth, we can see better precautions taken and smarter choices being made if diagnosed with HIV. However, all of this must start with people going out and being tested so they can protect the ones they love and help the country become AIDS-free. This will help their economy prosper by being able to have every family bring food to the table. Without protecting the people of Zambia against AIDS, we will find that food insecurity will not improve, leaving the great people in Zambia sick and hungry.

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