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South Sudan, Infectious Disease

South Sudan's Struggle Against Infectious Disease

South Sudan is a country in Eastern Africa, home to over 12 million people. The country is a republic with Salva Kiir Mayardit serving as president since 2011 (CIA). The White Nile flows through the country in which feeds the Sudd, a large swampy area in the middle of the country. The Nile allows the country to facilitate trade and urbanize some rural areas near the river (UNDP). The country also contains plains to the north and highlands in the south. The country has very fertile soil however there is poor land cultivation and the land suffers random dry spells. South Sudan produces many agricultural products such as maize, rice, wheat, sugarcane, peanuts, and many fruits. Despite these products, South Sudan relies heavily on oil for budget revenue causing the GDP to raise to 2.904 billion USD. However, since independence, oil production has slowed. Due to the decreasing value of the economy, 66% of the population is below the poverty line, living on about \$2 a day (CIA). This financial insecurity strengthens issues of food insecurity already prominent in most South Sudanese lives.

Families are very large in South Sudan, with some families having up to twenty children. Family is a crucial facet of everyday life. Consequently, families typically live together or in very close proximity. Extended family is also important to the culture. Due to prolonged conflict in the area, many widows and orphans are taken care of by more distant relatives. Traditionally, women are the house makers and child bearers while men act as the decision makers and laborers. However, due to conflict leaving many women spouseless, it is currently more common for women to take on positions generally associated with a man (Cultural Atlas).

There are 8,000 primary schools, 120 secondary schools, and one university throughout the entire country (Global Partnership for Education). Out of every other country, South Sudan has the highest proportion of children not attending school. According to UNICEF, more than half of children under the age of 15 are not going to school (cited in NPR). Much of this inaccess is attributed to conflict. Violence spreads and many children are continuing to be displaced, making it difficult for them to find and continue education. Therefore, 73% of adults and 84% of women are illiterate. Due to extremely low education rates, as much as 85% of the working population is in non-wage work such as subsistence farming and livestock rearing (UNDP).

93% of housing in South Sudan is grass-thatched mud-houses (Urban Africa) and 83% of citizens live in rural areas (UNDP). Although most of the country's population is malnourished and food insecure, there are many common foods that are regularly consumed when available. Peanut is a key ingredient used as a base and thickener for many meals. Goat and beef is also common when available, and it is eaten in small portions. A common food is a flatbread called Kisra, which can be served with many entrees such as ful (an Arabic stew), Tamia (deep-fried ground chickpeas), goat stew, perch (smoked or deep-fried fish served with chili relish), and baseema (cake made with yogurt, sesame oil, and sugar) (World Travel Guide).

However, many of these items are unavailable to the general public. Reliefwebs analysis of January 2019 shows that 54% of the population (6.17 million people) has reached crisis-level acute food insecurity. Within that number, 1.36 million people have reached emergency acute food insecurity, and 30,000 have faced catastrophe level (Reliefweb). A major factor of food insecurity in South Sudan is attributed to prolonged conflict in the area. South Sudan became independent in 2011. However, in 2012, the government shut down oil production due to disagreements with Sudan. In December 2013,

disagreements between the government and opposing forces killed tens of thousands of residents causing displacement and food insecurity.

A major problem in South Sudan is infectious disease. It spreads like wildfire throughout many regions. The degree of risk is very high. Many of the common diseases are Hepatitis A and E, rabies, malaria, typhoid fever, and meningococcal meningitis (Index Mundi). Many of the diseases in the region are unique to South Sudan and rarely found outside of the country. South Sudan has been referred to as “the forgotten front line when it comes to health” (MedicineNet).

Despite infectious disease being a problem within itself, it poses a threat to country-wide food security. Infectious disease that affects livestock damages the productivity of the nation. As the population decreases due to disease, agricultural workers for domestic use and exports decreases as well. This not only increases malnutrition rates, but decreases nominal GDP for the entire country. Less productivity due to sickness leaves long-lasting damage that is hard to repair. The cycle continues when malnourished Sudanese citizens are more susceptible to infectious disease due to their failing immune systems and weak bodies. This cycle gets harder and harder to break the longer it continues. Efforts to break the cycle of infectious diseases and hunger are detrimental to the future of South Sudan.

The risk of infectious disease in South Sudan has not shown improvement. The health care systems have crumbled, mostly due to the consistent conflict. Many communities do not have access to basic health care, particularly in the northern regions that are close to the border with Sudan (ICRC). South Sudan has approximately 120 medical doctors and 100 registered nurses for a population of nine million people (Ministry of Health). Consequently, South Sudan is also a country with the highest maternal mortality rates in the world. Only about 25% of the population has regular access to health care services (FutureLearn). The infrastructure in the country is lacking as well as shortage of medical professionals (Ministry of Health). Improving infrastructure in South Sudan would significantly improve citizens ability to acquire medical aid, however this is a very expensive option, one that may not seem plausible for this country lacking in funds.

Much of the land in South Sudan is fertile, yet much of it is not cultivated. Due to the correlation between food insecurity and infectious disease, it is crucial that as much land as possible is cultivated. A good chunk of the land is not being used due to chronic inefficiency of practices to cultivate the land. Educating local farmers to effective farming practices could improve their crop yield, while also building connections with those farmers. Comradery and understanding between cultures is important in order to work together to solve these problems.

The equipment to harvest the fields is almost nonexistent. Farmers typically use rudimentary hoes, even old tractors and ploughs are not available. Although the soil is fertile, lack of access to water and the scorching heat cracks much of the soil and the crops do not yield nearly as much food that is necessary. By improving farm technology, crops would essentially provide more food. Full bodies have far stronger immune systems and therefore would cut down on infectious disease. Creating a program within a foreign-aid organization that allows for people to donate farm tools would give South Sudanese farmers the ability to cultivate their fields with more skill, accuracy, and success.

The government of South Sudan originally had little to say about the issue of infectious disease. The country lacked resources to be able to provide health care, however as of late 2018, more steps are being taken. The vice president of South Sudan opened the first multipurpose infectious disease unit in Juba, the capital of South Sudan. Although this unit was specifically made for suspected Ebola patients, it is an improvement as the government attempts to intensify their preparedness for outbreaks of infectious disease. The vice president thanked many organizations such as Ministry of Health and World Health Organization for their continued support in improving the health sector of the impoverished country

(WHO). These organizations are successful due to their rapid response and ability to pinpoint specific needs for the country they help.

Despite this unit in the capital, more measures need to be taken. Vaccinations are one of the most plausible and effective solutions to infectious disease. Vaccinations would be extremely helpful due to their effectiveness and small size. It is possible to transport vaccines fairly easily, bringing hundreds of them at a time. Many of the vaccinations being administered are to children, in some ways completely excluding the adult population of workers and parents. In addition, these adults have been exposed to disease-causing bacteria their whole lives and therefore should also be treated with vaccines. Intensifying these efforts could result in largely decreased child mortality. In 2017, about 930,000 people were vaccinated in the country due to the efforts of the World Health Organization.

However, to implement more vaccinations, the following is necessary. The government must be fully compliant to foreign aid and give all the resources they have to this problem. The Health Association of South Sudan published a vision of health for the country. Among many goals, it includes people taking responsibility for their health by engaging with health care services, and reduced incidence of communicable disease. This vision allows for organizations such as Ministry of Health to narrow in on these goals and provide maximum population health benefits (SSMJ). If the government of South Sudan officially partnered with foreign-aid programs, resources could be pooled and more outreach would be possible. A goal of country-wide access to health care facilities and vaccinations would give the government more incentive to provide resources to foreign-aid programs and therefore begin to improve the rate of infectious disease. The people of South Sudan have been open to programs in which vaccinate their kids, therefore the government should feel pressure from the people to institute such alliances.

Another factor of increased spread is lack of disease surveillance. This makes it particularly difficult to easily detect, know the severity, and appropriately respond to the outbreak. Implementing response systems and teams could significantly improve the knowledge of the specific disease and improve aid to that area before the disease spreads further. These response teams would need to be trained and would be composed of mostly volunteers through programs theoretically paired with the South Sudanese government. It is crucial that a few of the volunteers are able to speak the native language. The ability to educate the citizens of the affected area is important in order to avoid confusion and potential conflict. Rather than go to communities and start solving problems, communication with those in the area would give more insight into issues and what should be done first.

Access to areas of outbreak would often be met with obstacles. Transportation in many rural areas of South Sudan is difficult due to unmaintained roads that cars are unable to traverse. Infrastructure improvements are an obvious solution, however it is expensive and unlikely to occur throughout the country as a whole. Disease surveillance teams would be located in at least four of the major cities: Juba, Winejok, Malakal, and Wau. These towns are located across the country, conveniently accessing each corner of the country. However, since South Sudan is roughly the same size as Texas, the surveillance teams would need to travel by car. Although they would not be able to reach every remote village this way, the cars would take them as close as they could. The teams would then travel by foot, or other local forms of transportation to reach the area they need. It is not typically an easy trek, but necessary to make the team successful to the citizens of South Sudan.

When these response teams arrive, they would be equipped with affordable and standardized kits that would include items such as vaccinations, malaria nets, pharmaceutical drugs, and other supplies and equipment that could provide basic care and manage epidemics. Despite these kits being cheap, they still must be paid for. This is where foreign-aid plays a part in this challenge.

The United States alone has spent billions of dollars on humanitarian assistance in South Sudan. However, the United States government is concerned that the prolonged violence has not ceased and that the money is only exacerbating the issue. Spokesmen from South Sudan believe that the United States abandonment of South Sudan would prove to “plunge the country into further disaster” (Washington Post). Despite these concerns, it is detrimental for South Sudan to be provided foreign aid. Separate from morals, the United States economically benefits from helping the Eastern African country. The relationships provides trade opportunity in which provides jobs. U.S. exports of goods to South Sudan held about 400 jobs in 2015. South Sudan also contains many oil reserves which are beneficial to America. It is of value for the United States to continue to provide this foreign aid to pay for various life-saving equipment such as vaccines and improvement of infrastructure like roads to aid disease surveillance team transportation. The problems in South Sudan will not be solved by simply writing a check, but rather conversations and teamwork between the two countries about where to put the money in order to benefit all citizens and alleviate the biggest problems, such as hunger and disease.

Many Americans are not aware of the issues in South Sudan. It is rare to hear anything in the news, even though nearly half of the population is facing extreme hunger. The benefits of humanitarian assistance in South Sudan is unknown in America, allowing the government to make decisions about foreign aid without much pushback from the public. The United States must become more educated about the epidemic of hunger and disease in South Sudan. Children and teens in this generation are consistently becoming more politically involved and using their voices for those who are being silenced. It is important for schools to be speaking openly with students about world hunger and the many issues that come with it, such as infectious disease. Education in local communities is an easy and effective way to show support for countries like South Sudan and open the eyes of the public to these catastrophes. Hosting hunger banquets or fundraisers to donate to humanitarian aid organizations, or writing to elected officials to encourage them to continue foreign aid is a great way to get Americans involved in helping citizens in South Sudan continue to get help from first world countries.

Some Americans argue that the United States should fix its own issues before helping other countries. However, if all the countries in the world followed this principle, everyone would be struggling. It is beneficial to help other countries. Building relationships and allies is important in politics, aside from helping others because they need it. Although the economy in America is not perfect, aiding South Sudan benefits the United States in some ways. Therefore, despite any issues at home, it is right to help others who have more.

Education in South Sudan is important too. Many kids do not attend school, therefore they are somewhat blind to the dangers of disease. With outbreaks of sickness, many people may not know the risks, symptoms or preventions. Creating education programs or improving those already existing could expand the knowledge that children have of these issues. Kids may see illnesses killing their neighbors and family, but not understand how to keep themselves safe. Providing curriculums on safe sex to deter HIV/AIDS, sleeping nets to prevent malaria, and basic hygiene to ward off respiratory diseases such as Meningococcal Meningitis would not only teach kids about the dangers they face, but allow them to not sit helplessly when some issues can be prevented.

These programs can be implemented in schools for the population that does attend. However, since many kids do not attend school, it is still important to reach them too. The adult population is would be helpful. Giving them information and resources to relay to their children would increase the amount of people being reached.

Overall, South Sudan is in desperate need of aid for infectious disease. Although the government is slowly showing improvement of this issue, prolonged conflict, inability to access resources, poor infrastructure, poor education and food insecurity makes infectious disease a hard beast to conquer.

However, by government alliances with foreign-aid programs, disease surveillance teams, response kits, education, and vaccinations, there is hope in sight for South Sudan to one day have a solid handle on the challenge of infectious diseases in their country.

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