The Health Status of Somalia

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Abstract

The Horn of Africa is home to the country of Somalia. Somalia is a low-income country that relies on its agriculture and livestock industry for survival. Many of the Somali people are semi-pastoral or nomadic. The country has a long history of internal violence and government instability resulting in many Somali people becoming internally displaced within the country. As a result of the weak central government, the country has a disjointed and struggling healthcare system. The healthcare system is primarily governed at the regional level with each of the three regional zones having different levels of success in providing healthcare to their citizens. Healthcare is delivered through both private and public facilities with most services being delivered in the private sector. The system suffers from a shortage of healthcare workers and basic medical equipment. Disparities exist between rural and urban areas as most health centers are concentrated in the more urban, northern parts of the country. The southern more rural areas are under the control of the Al-Shabaab terror group which has targeted government officials and healthcare aid workers in the past. The measures of health for Somalia rank among the worst in the world, especially for women and children. Recent interventions including maternity waiting homes and the female community worker program have been implemented to address the gaps in healthcare for women and children. There is a need for additional interventions to address the

gaps in healthcare that impact women and children as well as the rest of the population.

Introduction

Somalia is a country often classified as a fragile state which is an accurate description of both the health of the Somali people as well as the country's healthcare system. It is classified as a low-income country and is located in Eastern Africa in an area often referred to as the Horn of Africa. The population of Somalia is estimated to be 20.3 million; however, this number is hard to estimate due to a large proportion of the population being nomadic or semi-pastoralist (Institute for Health Metrics and Evaluation, 2019). The main industries in Somalia include livestock, money remittance and transfer services, and telecommunications (Central Intelligence Agency, 2021). Livestock accounts for 40% of the country's GDP. Politically, the country has suffered from a long history of instability and violence since it gained independence from Great Britain in the 1960s. Due to the internal violence, an estimated 3 million people are internally displaced within Somalia with many living in displaced persons camp settings (Alawa et al., 2021).

The indicators of health status paint a grim picture of the health of the people of Somalia. The average life expectancy for all Somali people is 54 years with women having a life expectancy of 59.2 years and women having a life expectancy of 54 years (World Health Organization, 2021). The health outcomes

for women and children consistently rank among the worst in the world. The infant mortality rate is 74 per 1,000 live births (Institute for Health Metrics and Evaluation, 2019). The neonatal infant mortality rate is 36.9 per live births and the under 5 mortality rate is 117 per 1,000 live births. The maternal mortality rate is 829 per 100,000 live births. The leading causes of mortality in Somalia are respiratory infections and tuberculosis, maternal and neonatal causes, other infections, cardiovascular disease, and enteric infections. The leading causes of DALYs are similar to the leading causes of mortality except nutritional deficiencies rank in the top five causes and cardiovascular disease is excluded. The leading causes of morbidity are mental disorders, nutritional deficiencies, other non-communicable diseases, musculoskeletal disorders, and skin diseases.

Based on the above data, the most vulnerable populations in Somalia are women and children. As of 2017, the country had the fifth highest maternal mortality ratio in the world and the second-highest under-five mortality rate (World Bank, 2019). Additionally, they have the ninth highest fertility rate in the world of 5.41 children per woman (O'Neill, 2021). Some factors that contribute to these statistics are that women cannot obtain treatment such as prenatal care without a male chaperone (Bogren et al., 2020). If a woman needs emergency medical treatment such as a caesarian section, the physician must obtain consent from the male head of household. This consent is often delayed due to misconceptions surrounding c-sections and other medical treatments which

further puts the woman's health at risk. Somalia also has the lowest prevalence of antenatal care and skilled birth attendants to provide care for pregnant women with a prevalence of 6.3% and 9.4% respectively (Yaya & Ghose, 2019). Another contributing factor is that female genital mutilation or cutting is still practiced in some parts of Somalia and this leads to worse reproductive health outcomes especially when giving birth (Bogren et al., 2020).

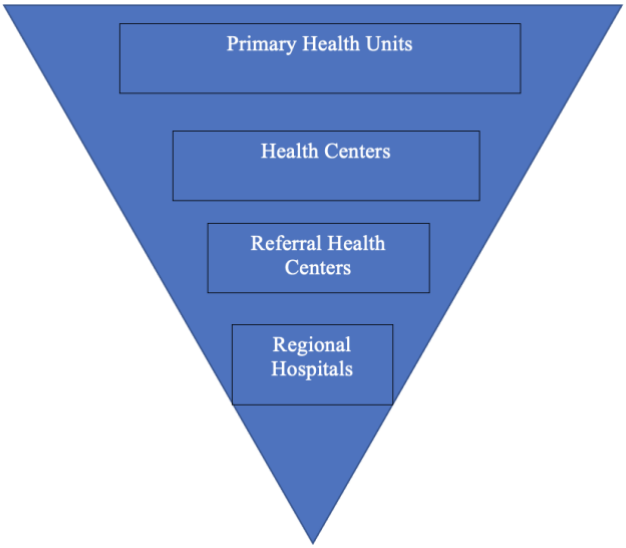
The overall health system of Somalia has suffered from instability in the central government and as a result, it is disjointed. After the central state collapsed, regional healthcare administrations emerged with their own ministries of health (Warsame & Patel, 2016). The three regional administrations are Somaliland, Puntland, and South-Central Somalia. Somaliland is in the northwest region and declared independence from Somalia in 1991 but is not internationally recognized. This region is relatively stable and has better health outcomes than the other two regions. Puntland is in the northeast and has a semi-autonomous government. Finally, the South-Central Somalia region is in the lower part of Somalia and is more rural than the other two regions. This region is the most unstable due to the presence of the terror group Al-Shabaab, an Al-Qaeda affiliate that controls parts of the region. Healthcare services are primarily delivered through a combination of public and private health facilities with most of the facilities being private (Ahmed et al., 2020).

Critical Analysis of Health System Building Blocks

To evaluate a country's health system the World Health Organization focuses on the six building blocks of a health system which include: service delivery, health workforce, health information systems, medical products, financing, and governance. The facilities in the public health sector are divided into four types of health facilities: primary health units, health centers, referral health centers, and regional hospitals (Heritage Institute for Policy Studies & City University of Mogadishu, 2020). Primary health units are the most commonly found health facilities and are often the only type available in rural areas. These facilities are community-based and have limited curative and preventative services. Health centers are found at the sub-district level and offer services similar to primary health units but focus on maternal and child health services including deliveries, immunizations, and nutrition. Referral health centers are found at the district level and offer similar services to the previously mentioned facilities but tend to be larger. Regional hospitals are found in regional capitals with the majority being private or semi-private. In addition to these facilities, there are limited specialized facilities such as tuberculosis centers, computed tomography/antiretroviral therapy centers, and mental health facilities. Most of the services offered at the public health facilities are free or have a low copay, meanwhile, services offered in the private sector tend to cost individuals more out of pocket since there is no insurance system in Somalia. The private health sector

has facilities similar to the ones in the public health sector, but the private facilities tend to have better capacity, service delivery, diagnostic equipment, and more experienced staff. Often individuals with chronic health conditions or complicated health issues such as cancer must seek specialized care in the private sector. There is a large presence of non-profits in Somalia such as UNICEF, IOM, WHO, and World Vision who help run semi-private or private health facilities. The greatest strength of the health delivery in Somalia would be that much of the population has access to free or low-cost basic primary health care through the public health sector or non-profits. The greatest weakness would be that most specialized treatment is only available in the private sector which can have high out-of-pocket costs.

Figure 1: Types of public health facilities in Somalia



Governance of the healthcare system is set up to be divided between three levels: the federal government, federal member states, and regional authorities. The federal government and federal ministry of health is intended to regulate the health sector; however, in recent years the regional health authorities have been governing most of the health decisions in the country. Governance differs among the previously mentioned regional zones. Each has made progress in recent years in service delivery and governance, but South-Central Somalia is still behind the other two regions. In the South-Central region, the donors cannot freely support health services due to the Al Shabab control of the region. Aid and healthcare workers have often been the target of violence in this region (Heritage Institute for Policy Studies & City University of Mogadishu, 2020).

The healthcare workforce has also suffered as a result of the instability and violence in the country. Due to the ongoing conflict, many healthcare workers have left the country or have moved from rural areas to safer urban areas resulting in an unequal distribution of workers (Heritage Institute for Policy Studies & City University of Mogadishu, 2020). The ratio of nurses, physicians, and midwives to people is 0.4 per 1,000 which is far below the WHO's recommended minimum of 4.45 per 1,000 people. The public health sector struggles to retain health workers for several reasons including low salaries which leads many physicians to practice in both the public and private sector (Warsame & Patel, 2016). In addition to the shortage of healthcare workers, many workers are inadequately trained. During

the civil war period from 1991 to 2012, a generation of future medical professionals did not receive training and current medical professionals did not receive continuing education (Yalahow et al., 2017). There is currently very limited infrastructure and faculty capacity to increase educational programs for health professionals (World Health Organization, 2015). Many of the healthcare education centers became private after the collapse of the central government. These facilities do not have a standardized curriculum or adequate equipment to train medical professionals (Yalahow et al., 2017). The country is attempting to address these shortages by training female community health workers and recruiting expatriate medical providers. The greatest strength of the healthcare workforce is the recent addition of female community health workers to address the workforce shortages in rural areas. The greatest weakness of the healthcare workforce is the shortage of providers.

Another side effect of an unstable central government is that there is not a tax base for the government to draw from to help fund healthcare services (Warsame & Patel, 2016). The government of Somalia contributes only 5% of the total healthcare spending in the country (Heritage Institute for Policy Studies & City University of Mogadishu, 2020). The government per capita spending on healthcare averages $10-12 per person per year which is far below the global standard. Meanwhile, the United States government spends an average $9,054 per person per year on healthcare (OECD, 2021). Most of the funding for healthcare

in Somalia comes from outside donors such as non-profits and humanitarian organizations (World Health Organization, 2015). There is no real health insurance system and no universal healthcare system; however, many of the services provided in the public health facilities and NGO-run facilities are free. However, specialized treatments and chronic disease treatments require using the private system which has high out-of-pocket costs (Heritage Institute for Policy Studies & City University of Mogadishu, 2020). In 2017, 48% of households reported paying for health expenses out of pocket (Warsame & Patel, 2016). The greatest strength in the area of healthcare financing is the availability of low or no-cost basic care. The most significant weakness related to financing is the dependence on outside donors to fund the system. Often the priorities of these outside donors may not align with the needs of the Somali people.

The most prominent weakness of the existing health information system in Somalia is that there is not a central record-keeping system and most patient records are not digitized which limits the ability to gather patient-based statistics to inform medical decisions. There is a lack of overall data collection in the country as the last national census was collected in the 1970s (Ahmed et al., 2020). However, one positive of the health information system is that some public health officials in the country have begun gathering patient-based statistical data using district-based health information software (Heritage Institute for Policy Studies & City University of Mogadishu, 2020). The country has a national

surveillance system that is used to track 12 diseases that are considered nationally notifiable.

The country also suffers from a lack of availability of the needed medical products. The facilities often lack necessities such as improved water sources and power (Elkheir et al., 2014; World Health Organization, 2015). The country has an overall shortage of advanced technology for medical treatments such as those needed for cancer treatment, surgery, and dialysis. There are many concerns regarding medications including the lack of a regulatory authority to monitor drug quality and importation (World Health Organization, 2015). During COVID-19, the country has suffered from supply chain issues as they do not produce any medications within the country (Alawa et al., 2021). Over-prescription and overuse of antibiotics are also concerning along with the lack of available doses for children (World Health Organization, 2015).

Overall, Somalia's healthcare system faces numerous challenges many of which stem from past violence and government instability. As of 2017, the country had one of the lowest scores on the Universal Healthcare Coverage Index at 22% (Heritage Institute for Policy Studies & City University of Mogadishu, 2020). However, many people, especially in more urban areas have access to basic healthcare services at little or no cost.

Effective Health Interventions

Two recent interventions Somalia had implemented to improve the health

outcomes for women and children are maternity waiting homes and the female community worker program. Starting in 2015, the UN Population Fund began creating facilities in displacement camps around Somalia where women could receive health services during pregnancy (United Nations Population Fund, 2015). Throughout their pregnancy women who live in the displacement camps can visit the facilities for prenatal care and during their last month of pregnancy, they can stay in the facility for full-time observation. These centers are run by midwives and skilled nursing assistants that supervise the women and determine if they need to be transported to the hospital for additional treatment. Another major advantage of these centers is that they have a vehicle that can be used to transport the women to the nearest hospital if needed. The advantages of these facilities are that they can help address the three maternal delays in seeking care: the delay in deciding to seek medical care, delay in reaching medical care, and the delay in receiving adequate care which often result in higher maternal mortality and increase the chance of survival for both the mother and child (Aden, 2019). Some potential challenges or negatives of this intervention are that these facilities are sometimes overcrowded, in unsafe areas, and the intervention is not as easily implemented in non-camp settings (Mohamed et al., 2021).

A second intervention created by the Somali health authorities is the female community health workers program. In this program, women receive training for 12 months and are then placed in communities with basic medical

supplies to provide basic medical treatment (World Health Organization, 2015). They perform home visits to provide basic health services with a focus on maternal-child health services such as antenatal care, treatment of common childhood diseases, immunization, and reproductive health. These workers also record births, deaths, and migrations in their communities. They visit 5-7 homes a day and cover a rural population of 600-1000 people (Warsame & Patel, 2016; World Health Organization, 2015). Some advantages of this intervention include the ability to target rural communities where health resources are scarce, pregnant women and mothers often feel more comfortable receiving treatment from a female healthcare provider, it addresses the shortages of healthcare workers in the country, and the intervention takes a community-based approach. Some potential challenges for this intervention are that the ratio of workers to residents is high, the workers could face supply shortages or theft of needed supplies, and the workers are put in potentially dangerous situations traveling from house to house (Miller et al., 2020).

A proposed future health intervention for Somalia would be to expand the female health workers program. This program would build on the foundation of the community health workers going out in rural communities to provide basic health services. The program would involve greater recruitment and training of female health workers so that the ratio of workers to residents would decrease. The program would be expanded to include nurses, midwives, and physicians at

regional levels. During female health workers' in-home visits, they would have the ability to refer more advanced medical needs to either the midwives, nurses, or physicians as needed. The more specialized healthcare workers would then be stationed in communities and be able to provide needed care. The goal of this intervention is to improve the overall health outcomes of the country and address the shortage of healthcare workers in rural areas.

As far as overall health goes, Somalia has many areas of concern and issues that need to be addressed sooner rather than later. The central government's lack of stability is the underlying cause of many of the weaknesses in the health system that contribute to the overall poor health of the citizens. As the government gains stability and structure, hopefully, the healthcare system and indicators of health for the country will improve. The most urgent health need in the country is the health of women and children. This group suffers from the worst health outcomes and future interventions need to address the barriers this group experiences in seeking care. Despite the poor indicators of health and weak healthcare system, the country, and non-profits within the three zones are doing their best with their current available resources to improve the health of the Somali people. Hopefully, these continued efforts will slowly improve the health outcomes of the people and future indicators of health will show progress.

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