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Senegal's Global Health Example in the Fight to Achieve the Sustainable Development Goals

By: Annika Skogg

Abstract

In a time when the entire world is experiencing the importance of global health, Senegal has been highly praised for the effectiveness of its COVID-19 response despite being a low-resource country in West Africa. Senegal's COVID-19 response displays the central pillars of the country's community-based public health programming that has made it so successful in decreasing malaria transmission and improving maternal health. This study combines qualitative data with personal experiences during a faculty-led study abroad program to Senegal to examine Senegalese public health campaigns, evaluate the reasons for their success, and ultimately learn from a leader in the global fight to eliminate malaria and improve maternal health. My analysis shows that Senegal achieved substantial public health success using momentum from civil society, an active national government, and private sector partners. The Senegalese national government set ambitious goals for eliminating malaria and improving maternal health, secured generous funding from private sector partners, and fostered a sense of community ownership. Senegal has created a sustainable model for achieving public health objectives using community-health campaigns. The country's public health success highlights the coordination and partnership aspects of the United Nations Sustainable Development Goals. In this critical moment when countries worldwide are facing complex problems in health, economics, and development, innovative minds from around the globe must collaborate to develop groundbreaking, equitable solutions that work across all contexts. Senegal's success should serve as a model for the global health community in the challenge to achieve the Sustainable Development Goals.

Introduction

Two standard phrases in the global health community are that “infectious diseases know no borders” and that “global health can no longer be differentiated from local health” (Daulaire 382). As our increasingly globalized world has seen throughout the coronavirus (COVID-19) pandemic, disease threats can no longer be kept local. The rapid spread of COVID-19 has shown that our global society is too interconnected for us to ignore public health. What a particular community does—or does not do—to control a public health issue can have direct impacts on local communities and the world. Jeffrey Koplan, the Vice President of Global Health at Emory University, emphasizes that “the rapid increase in speed of travel and communication, as well as the economic interdependency of all nations, has led to a new level and speed of global interconnectedness or globalization, which is a force in shaping the health of populations around the world” (1994). Globalization has created a need for everyone to focus on global health, as the health of particular populations can affect the health of us all.

Finding solutions in the midst of the COVID-19 pandemic has been a collective fight that has required worldwide collaboration to share knowledge in public health strategies, pharmaceutical treatments, and vaccine development. This global collaboration is a key intent of United Nations Sustainable Development Goals (SDGs) that were released in 2015. According to UN Secretary-General António Guterres, these goals are a “collective response to building a fair globalization” (“SDGs” 3). While the previous Millennium Development Goals (MDGs) focused on eradicating poverty in the world’s poorest places, the SDGs are a new global commitment that intend to find better solutions for more sustainable development by 2030. As Director of the UN Sustainable Development Solutions Network Jeffrey Sachs writes, “global health is eluding the entire planet. The SDGs should therefore pose goals and challenges for all countries—not what

the rich should do for the poor, but what all countries together should do for the global wellbeing of this generation and those to come” (Sachs 2008). Now more than ever, creative and intelligent minds from across the globe must collaborate to develop innovative, effective, and resource-efficient solutions to find more sustainable development paths. This is the true objective of the United Nations’ SDGs: collaboration and partnership to bring an end to disease, hunger, and discrimination.

Defining Global Health and its Importance

This renewed commitment to global sustainability brings improving global health to the forefront. Koplan and his colleagues highlight global partnership in their definition of global health, which they characterize as a topic “that places a priority on improving health and achieving equity in health for all people worldwide. Global health emphasizes transnational health issues, determinants, and solutions; involves many disciplines within and beyond the health sciences and promotes interdisciplinary collaboration” (Koplan 1995). The COVID-19 pandemic has taught us that health is not only a national or regional issue, but a global issue. Global health addresses challenges throughout the world and recognizes that solutions to our complex healthcare problems could lie anywhere in the world. Interdisciplinary teams must cooperate to address our current sustainability challenges and to ensure that disease eradication occurs equitably, not only to those with privilege.

Enhancing global health not only protects the health of local populations, it also improves the quality of life for global populations and promotes more sustainable development through the growth of economies and community stability. Former UN Secretary-General Ban Ki-moon’s Centre for Global Citizens emphasizes that the SDGs “recognize that ending poverty must go hand-in-hand with strategies that build economic growth and addresses a range of social needs

including education, health, social protection, and job opportunities, while tackling climate change and environmental protection” (Sustainable 3). Achieving better global health not only protects our local populations and improves economies, but it is a key aspect of sustainable development in-and-of itself (Martin 2).

Two of the world’s biggest burdens of disease, defined as “death and loss of health due to diseases, injuries, and risk factors,” come from malaria and maternal mortality (Burden 1). These two diseases have been identified as key areas that need improvement by the global health community and the United Nations in both the MDGs and SDG number three, labeled “good health”. Sub-Saharan Africa is of particular focus because in 2017, this region faced double the disease burden from communicable diseases than any other region in the world. The burden of disease measures the years of life lost from disease morbidity or mortality and includes communicable diseases like malaria, HIV/AIDS, tuberculosis; maternal diseases like sepsis and hemorrhage; neonatal diseases like prematurity, encephalopathy; and nutritional deficiencies like iron deficiency and malnutrition (Global Burden). Most of the Global North no longer faces an extreme burden from any of these communicable diseases, yet these still pose a serious challenge for Sub-Saharan Africa. For this study, I will examine Senegal, a leader in the West African path towards achieving the SDGs, and its innovative strategies for preventing and treating malaria and improving maternal health. I will demonstrate how Senegal’s ambitious national health programs have created real change that should serve as a sustainable model in the fight towards achieving the SDGs. Despite its low resource environment, Senegal has led the world in government leadership, private sector commitment, and community engagement in its response to the COVID 19 pandemic. This response is rooted in the same ideals that have made Senegal’s public health campaigns successful in the past.

The Burden of Malaria in Sub-Saharan Africa and Senegal

In order to understand Senegal's initiatives to prevent and treat malaria, we need to understand the current global prevalence of malaria and how it is transmitted. In 2016, 90% of global malaria cases and 91% of global malaria deaths (that is 194 million in this region) were in the World Health Organization's African region (Malaria 1, Figure 1).

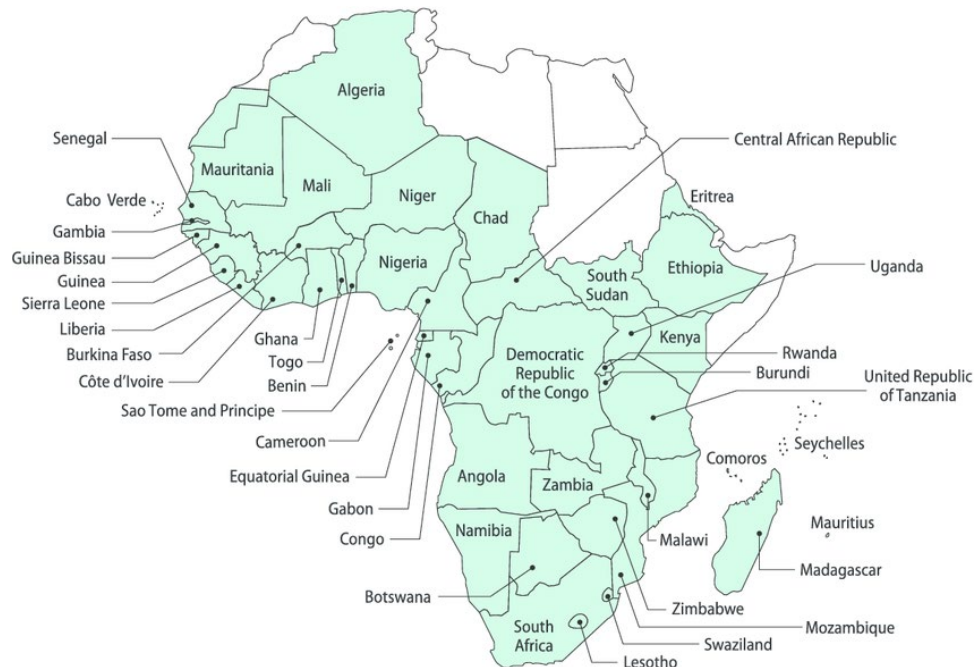


Figure 1. Map of the World Health Organization's Africa Region. Source: Varenne, Benoit. *Promoting Oral Health in Africa - Prevention and Control of Oral Diseases and Noma as Part of Essential Noncommunicable Disease Interventions*. WHO Regional Office for Africa, 2016.

Malaria is transmitted by female mosquitoes of the *Anopheles* species, and it affects the red blood cells of the liver. The disease is treatable if symptoms are identified as malaria quickly enough. The incidence of malaria in Sub-Saharan Africa has decreased rapidly between 2000 and 2015 with the introduction of preventive insecticide-treated nets, diagnostic confirmation by rapid diagnosis tests, treatment with artemisinin-based combination, and community engagement in vector control (Malaria 2). The malaria incidence rate in the WHO African region fell by 25% between 2010 and 2016, which is extraordinary progress for a region this size (World 38).

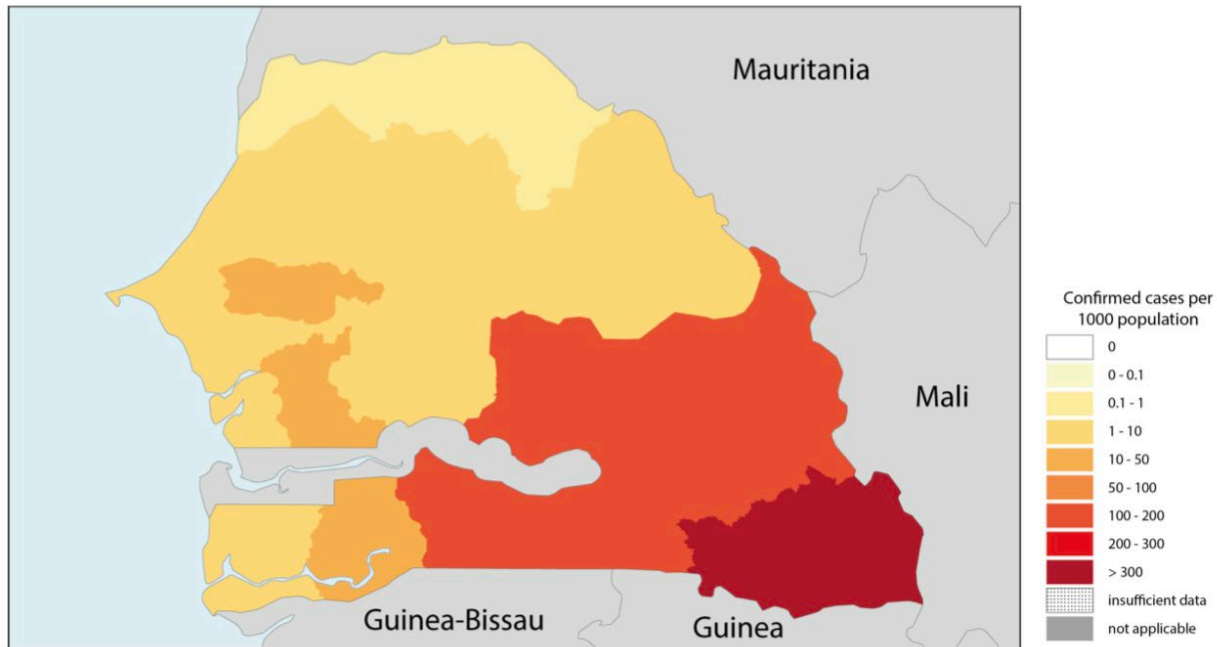


Figure 2. Confirmed cases of malaria per 1000 people. Source: *Senegal Country Profile*. World Health Organization, 2018, *Senegal Country Profile*, www.who.int/malaria/publications/country-profiles/profile_sen_en.pdf?ua=1.

Malaria transmission in Senegal is largely dependent on rainfall amount and degree of urbanization. There are two epidemiological regions of Senegal that receive different amounts of rain and therefore face different malaria transmission rates. The northern Sahel region receives the least amount of rain and sees a malaria transmission peak just after the rainy season (July-October), but very low transmission rates throughout the rest of the year. The southern tropical zone faces malaria transmission throughout the year, with a peak during the rainy season (President's 12). The moist conditions and standing water are most conducive for mosquitoes to breed. Not only is the Southeast region more wet, the region is made up of rural villages that are widely spread apart. During the rainy season, roads wash away and travel to local health "posts" for malaria treatment is more difficult compared to the more-urbanized northern and coastal regions of the country. In addition, most of the urban cities are concentrated along the coast and in the northern region. The capital, Dakar, is on the peninsula on the western coast of country along with many of the other cities like Thiès and Saint Louis. As seen in Figure 2, malaria

transmission is low in these urban cities, which all have fewer than 50 confirmed cases of malaria per 1000 people. In contrast, many villages in the more rural eastern part of the country still face much higher degrees of transmission.

In 2016, Senegal had a malaria incidence that was less than 1%, meaning there were less than 100 cases per 1000 people at risk (Senegal President's). Even with these current low incidence rates, malaria elimination remains a high priority in Senegal as it has been for some time. The fight against malaria in Senegal truly became successful with the inauguration of the National Program for Malaria Control in 1995, created with the help of the World Health Organization, the World Bank, United Nations International Children's Emergency Fund (UNICEF), and the United Nations Development Program (Touré, Fatou 15). In 2000, in response to the MDGs, the Senegalese Ministry of Health defined a Quality of Healthcare and Health Services Policy aimed at achieving the MDGs by 2018. To integrate the policy, the Ministry developed the Quality Program to "create an environment in which healthcare system actors know what they must do to supply quality healthcare and have the means to do so" (Konate 7).¹ The program is a combination of inter-professional activities in all levels and programs, coupled with community engagement. The Ministry emphasizes that "the assurance of quality is the everyone's responsibility; from the central level to the regional level, in healthcare disciplines, professional bodies, and communities" (Konate 8).² Partnering with USAID and other NGOs like Speak Up Africa and WAHA International, the Ministry of Health focuses its programs on community engagement. The branch of the Quality Program that focuses on malaria control, The National Program for Malaria Control, focuses on improving accessibility to insecticide-treated bed-nets. In 2014, the program launched the "Zero Malaria Starts with Me"

campaign. This campaign operates around three pillars: political commitment, private sector engagement, and community engagement (“Zero”).

The first pillar encourages popular Senegalese parliamentarians, mayors, soccer players, teachers and musicians to popularize the importance of stopping malaria in communities and commit additional resources to continue the fight against malaria. These commitments often involve the private sector engagement pillar as well to ensure that malaria programs have sufficient funding. One company of particular importance is Wari, a money transfer service. Wari not only donated money towards the campaign, the company also set up accessible ways for citizens to donate funds directly towards eliminating malaria using their Wari accounts.

The National Strategic Plan for the National Malaria Control Program strives to achieve the pre-elimination of malaria status by 2020 (Senegal President’s). This means that the malaria incidence rate must be lowered to 5 cases per 1000 people at risk. To achieve pre-elimination status, the government has prioritized distributing insecticide-treated nets to all areas of the country using the Zero Malaria campaign. Since the beginning of the campaign, 8.9 million insecticide-treated nets have been distributed to all regions of Senegal (Senegal “Plan Nationale” 34). The current slogan for the program is “The Whole Family, Every Night, the Whole Year” and promotes the idea that every family member should sleep under a bed net every single night, all year in order to effectively prevent malaria (Ly 23). This slogan is popularized in home visits, which are the third and most effective pillar of the Zero Malaria campaign. Sponsored by Wari, Zero Malaria trained “community champions” to serve as community health workers and educate their neighborhoods about the dangers of malaria and the importance of sleeping under bed nets every night. In less than 6 months between 2016 and 2017, these community champions raised awareness with 8,310 people in 3,840 home visits (“Zero”). Like the Quality Program, Zero

Malaria prioritizes equipping communities to spearhead the fight against malaria. The Zero Malaria campaign highlights this priority on its website: “In Senegal, communities have always played an essential role in the fight against malaria. [...] Additionally, community systems provide a crucial platform for expanding equitable access to healthcare. [...] The elimination of malaria requires everyone’s engagement” (Le Programme 1).³ The champions explain symptoms of malaria, distribute insecticide-treated nets, and explain that malaria treatment for children (the most-affected population in Senegal) is free at local health posts.

Natural Malaria Prevention

As a supplemental malaria preventative option, many Senegal residents turn to natural home remedies and plants, including the consumption of baobab fruit juice and powder, called “bouye” in Senegal’s national language, Wolof. In an interview conducted with a 40-year-old Senegalese resident in Dakar about his personal malaria prevention strategies, the interviewee mentioned the antibiotic properties of the baobab fruit and its juice. Swearing by the healing nature of the baobab fruit, this man drinks bouye for malaria prevention, cold prevention, and as an anti-inflammatory, claiming that bouye also relieves arthritis (Nzalı).

The baobab tree is a large deciduous tree native in most parts of Sub-Saharan Africa, including Senegal. The pulp of the large fruits is commonly ground into powder to make drinks, season food, and preserve meats (Sibidé 3). The pulp of the baobab fruit has been shown to have high levels of Vitamin C, Vitamin E, potassium, and calcium (Caluwé 16). The Vitamin C content in baobab pulp (more than 2,500 mg/kg) is higher than any other fruit (oranges have 100 mg/kg). The antioxidant quality of Vitamin C has been shown to decrease blood pressure and increase immunity against tropical diseases (Caluwé 40). Extract from the bark of baobab trees has proven protective effects from malaria parasites (Akinwunmi 18). The use of baobab fruit as

malaria prevention is particularly important because not only are baobabs found all over Senegal, drinking bouye is a much safer alternative to taking commercial drugs every day.

All of these malaria initiatives including the Quality Program, the Zero Malaria Ends with Me campaign, and natural prevention techniques have helped Senegal make progress towards achieving pre-elimination status of malaria with the future goal of eliminating malaria. Like its malaria initiatives, Senegal has also made strides towards decreasing maternal mortality and working towards sustainable development by implementing innovative maternal health programs.

Improving Maternal Health in Sub-Saharan Africa Through Family Planning

Investing in the health of women and children also plays a crucial role in sustainable development. Currently, more than half the world's maternal deaths occur in Sub-Saharan Africa (Starbird 194). Nearly 75% of maternal deaths result from direct causes like severe bleeding, infection, high blood pressure, or delivery complications (Say e327). In the developed world, the risk of dying during pregnancy or childbirth is 1 in 3700. In Sub-Saharan Africa, however, the risk of death during pregnancy or childbirth is 1 in 38; that is a ten times higher risk ("MDG 5"). Ellen Starbird, Director of the USAID Office of Population and Reproductive Health, and colleagues uphold that "between 2012 and 2020, family planning could help [...] prevent 450,000 maternal deaths in 22 [USAID] priority countries" (194). Spacing births and keeping women healthier prevents unnecessary health complications. Experts recommend that one step towards improving maternal health overall lies in spacing births so that children are born at least three years apart. Using family planning to spread out births helps improve maternal health and gives mothers more time and energy to keep their kids healthy, too. Family planning helps save the lives of mothers and children as well as money. The UN reports that: "Every dollar spent on

family planning saves at least \$4 that would otherwise be spent treating complications arising from unplanned pregnancies” (Global Strategy 6). Investments in family planning are worth the health benefits and economic advantages.

Senegal recognizes that maternal health is the largest health discrepancy between their country and industrialized countries and the need to improve their maternal health is imperative. The most current estimate of the maternal mortality rate is 236 deaths for every 100,000 births (Devlin 1). In the 2009-2018 National Plan for Health Development, the Senegalese Ministry of Health identified the following interventions to improve maternal health: relaunch family planning, reach adequate coverage of prenatal consultation in all health districts, and increase skilled birth assistance (Senegal, “Plan Nationale” 33).

Senegal’s Urban Reproductive Health Initiative

Senegal has identified family planning as a priority since 1991, with the creation of the National Family Planning Program. In 2005, the country passed the Reproductive Health Law, aimed at creating a political, judicial, and regulatory environment that was suitable to scale up family planning measures (Senegal “Cadre Stratégique” 15). The law put forth specific reproductive health and family planning rights of Senegalese citizens. The country’s first plan centered around family planning was developed in 2012 as part of the Ouagadougou Partnership with eight other West African countries⁴. The partnership seeks to add 2.2 million new family planning users to the West African region by 2020 and change the conversation around family planning. The website explains that “This objective apparently may seem low, but it is in reality very ambitious in the context of the countries, characterized by low contraceptive prevalence rate, socio-cultural barriers, weak health system, a timid political commitment and limited funding” (The Partnership). To achieve their part in Ouagadougou Partnership, Senegal

developed an ambitious first National Plan for Family Planning in 2012. This plan, spanning from 2012-2016, helped increase the availability of modern contraceptive measures throughout the country. In 2010 the percentage of women using modern contraceptives was only 10%, by 2016 the percentage had grown to 23% (Senegal “Cadre Stratégique” 16). By 2020, the country hopes to have 45% modern contraceptive use.

These are amazing success statistics, but we must examine how Senegal was able to facilitate these results. The first ingredient of success was robust leadership from the national government. After the launch of the Ouagadougou Partnership, the Senegalese government asked for input from its citizens during the development of first national family planning plan. Religious leaders, community advocates, youth and other civil society groups were all involved. Fatimata Sy, Director of the Coordination Unit for the Ouagadougou Partnership in Senegal, described this period with: “For the first time, there was momentum for change. [...] The government set the tone with ambitious policies to change the status quo as well as the funding to back them up” (Sy 3). The government committed to doubling their domestic funding for family planning. To increase public awareness and demand for family planning services, the government launched a campaign to educate citizens about how frequent pregnancies can negatively affect the health of women and their children. The campaign ran on television, on the radio, on posters, in newspapers, and in magazines. Family planning messages were used in health programs, religious programs, music programs and radio debates (Benson 440).

To respond to the increase in demand, the country remodeled its contraceptive supply chain with the help of IntraHealth International, an NGO working towards improving women’s health by focusing on equipping health workers. IntraHealth developed an “Informed Push Model” to show contraceptive stockers which supplies are needed at certain locations and which

supplies are not currently needed. Using this system, Senegal has reduced contraceptive “stock-outs” to less than 2% (Daff 248). This means that 98% of the time, a woman who comes to a health clinic can leave with her first-choice contraceptive, the contraceptive she is most likely to use correctly. Making contraceptives available everywhere has dramatically increased their use. The last sector that remained was increased public awareness and cultural sensitivity discussion and education.

Senegal, a country that is 95% Muslim, often faces challenges from more traditional communities about modern contraceptives. The third aspect of the Urban Reproductive Health Initiative aimed to address these challenges. Just like the Zero Malaria campaign, family planning champions were created to help increase understanding of family planning and increase demand. Trained Muslim religious leaders lead small group discussions, radio and TV debates, and promote family planning in other religious settings (Benson 440). One man, Moussé Fall, is a Muslim imam who focuses on educating other imams about how family planning can respect Islamic thought.⁵ Fall’s mother died at forty-three from having pregnancies that were too close together. In her honor, Fall educates communities on the importance of proper spacing between births. Family planning advocates report that the Qur’an instructs women to nurse their children for two years before having another child as a natural form of birth control (Benson 440). Fall leads discussions about spacing births with Muslim community leaders who have questions. He believes that his success in Senegal should be a source of inspiration for all of West Africa, where similar challenges can face family planning initiatives (Fall 6). Often, imams come to his training sessions and are unfamiliar with family planning and spacing births. Conversations like those initiated by Imam Fall are educating communities and helping to change the atmosphere around family planning in Senegal.

Senegal's *Bajenu Gox* Initiative

In addition to training Muslim religious leaders about educating citizens about family planning, the Senegalese Ministry of Health also implemented a program where influential women in communities visit other women in their households to discuss sexuality, family planning, and pregnancy. The program is named *bajenu gox*, after the Wolof word for godmother, and was implemented under President Abdoulaye Wade in 2009. The program trains respected women in communities to change attitudes surrounding pregnancy and family planning and to support mothers during and after pregnancy. The godmothers visit households to promote birthing in a health facility, attending prenatal and postnatal consultations, giving children vaccinations, and spacing birth with family planning (Touré, Lalla 37). Sexual health education is not a part of the curriculum in Senegalese schools, so these *bajenu gox* also help answer questions about sex and pregnancy.

In 2015, there were 11,000 active *bajenu gox* in all 14 regions of Senegal (Ndaw 157). Between 2008 and 2015, maternal deaths in Senegal fell from 410 per 100,000 to 315 per 100,000 and the Ministry of Health credits the work of these godmothers' work in their communities (Maternal 4). To describe their influence, Ndeye Ndaw writes: "They have become model women and figures of social mobilization. They are invited to every step of the woman's day, where they are figures of honor" (Ndaw 161).⁶ *Bajenu gox* are well-respected and useful because they understand exactly what women are going through. They are valued for their wisdom and these women use this power to improve maternal health in Senegal. Girls who have questions about sexual health can come to these women to ask questions. These godmothers are "recognized by society for their leadership, charisma, and discretion" says one *bajenu gox* in

Dakar (Les Badéniou).⁷ They draw from their personal connections with their communities to improve the health of women.

Senegal's Mobile Midwives

Senegal recognizes that skilled birth attendants can also help to decrease maternal mortality. To help combat high maternal mortality rates in rural areas, a “Mobile Midwives” program was created in 2016. These midwives travel to different health huts in rural villages to see oversee community health workers, meet with pregnant women, and overall increase access to healthcare in rural areas (Senegal “Document Cadre” 2). These travelling midwives also help increase accessibility of essential healthcare products for women and children, advocate for preventative and promotional health services, and plan outreach campaigns with community leaders (Investing 17). Senegal is making a \$30 million investment over the next five years to improve transportation for Mobile Midwives and scale up the quality of healthcare facilities (Investing 16). This includes providing faster transportation for midwives so that they can be more effective in emergency births, increasing the effectiveness of the Informed Push Model for both medications and contraceptives, and recruit additional personnel for under-served regions. It is innovative efforts like this that are helping Senegal address geographic barriers and ultimately achieve the SDGs.

Global Health Lessons Learned from Senegal

All countries worldwide have something to gain from studying global health. The first lesson that we can learn from Senegal's example is that real change takes momentum, and it must come from all aspects of society: from citizens, from the government, and from international partners. Grassroots momentum for change within the country itself comes from citizens who are actively engaged and participating in community health campaigns. As Jeffrey

Sachs writes, “Large-scale societal change is often achieved in the hearts and minds of the people, and only afterwards accepted in legislation and economic policies” (Sachs et al 812). Senegal has seen extraordinary success through community engagement in health campaigns. The favorable outcomes of the Urban Reproductive Health Initiative would not have been possible without the input from civil society groups and debate among community leaders. Reaching pre-elimination status of malaria through the Zero Malaria Starts with Me campaign emphasizes the importance of community ownership over malaria in its own name. These programs demonstrate Senegalese citizens’ commitment towards improving global health and working towards sustainable development.

The second aspect of society that is critical to create ambitious change is commitment from national and local governments. In his recent article “Greater Political Commitment Needed to Eliminate Malaria” Minghui Ren analyzes the successes and challenges in the fight against reducing malaria to achieve the SDGs. He advocates for “a coordinated country response to ensure alignment of partners and engagement of sectors beyond health” in order to increase the impact of political and financial commitment in the highest-burden counties (Ren 3). His ideas recognize the importance of alignment and coordination that can only truly be carried out by an active national government. He argues further that, “Robust and coordinated action is needed by all endemic countries, donors, the private sector, academia and research organizations to strengthen malaria responses and prevent the unbearable loss of life” (Ren 4). Although he is speaking about malaria prevention, Ren echoes the goals of the all SDGs, which emphasize worldwide partnership and commitment to more sustainable development. Achievement of the SDGs will only take place if all challenges are met with robust and coordinated action.

Senegal is a leader in this challenge to coordinate robust action as seen by its aggressive national programs to end malaria and decrease maternal mortality and the connectedness between national programs. Both *bajenu gox* and mobile midwives work to reduce maternal mortality rates. Furthermore, the *bajenu gox* double as malaria community health champions to eliminate malaria while educating women about family planning. All of Senegal's programs examined in this paper are interconnected and truly exemplify the partnership aspect of the SDGs. Senegal's success and innovative healthcare in malaria prevention and maternal care should serve as a model for interdisciplinary coordination in the global health fight.

Another crucial aspect of political commitment is the implementation of initiatives that are supported by generous funding. In Senegal's case, the national government has made ambitious goals to reduce maternal deaths from 236 per 100,000 in 2017 to 70 per 100,000 by 2030 by scaling up *bajenu gox*, mobile midwives, and family planning (Maternal 11). In order to reach these objectives, the government has invested \$30 million in improving the availability of community health workers—Mobile Midwives, *bajenu gox*, and primary health care workers that can treat uncomplicated malaria (Investing 16). The government also secures \$20 million in funding for the Zero Malaria Ends with Me campaign from generous partners like the Bill and Melinda Gates Foundation, Wari, and the President's Malaria Initiative (President's 5). Real change must be supported by ambitious funding.

The final Senegalese strategy that can teach us about effective sustainable development is the focus on personal connection. Zero Malaria community champions, family planning imams, and *bajenu gox* use their connections with their communities to effect real change. These leaders are chosen for the wisdom and leadership that they can use to change health behaviors and understand their communities' dynamics better than any outside organization could. Using

citizens' personal connections to foster community ownership of health programs has been a key component of Senegal's success. The Zero Malaria campaign highlights this aspect in this way: "By working with each group, the [community health] campaign can act as a bridge between communities, political decision-makers, and the private sector, building relationships and solving information gaps to achieve national elimination goals" (Boslego 53). Senegalese community health campaigns recognize the importance of building relationships within communities to successfully make behavioral changes.

Senegal's national programs have served as examples in West Africa in the fight against malaria and maternal mortality. The Senegalese Zero Malaria Starts with Me campaign inspired a pan-African campaign to end malaria through political commitment, private-sector partnership, and community engagement. In May 2019, the World Malaria Day was slogan was "Zero Malaria Starts with Me". The theme aimed to translate the successful Senegalese community-engagement techniques to other African countries still working to fight malaria. Minghui Ren emphasizes that "strengthening malaria programmes through integration with community-based primary health care programmes [...] can also help to create sustainable foundations for malaria programs" (Ren 3-4). Not only do malaria control programs help to eradicate malaria, they also develop sustainable programming methods. Since July 2018, 11 countries have joined the fight to eliminate malaria by engaging their communities with spin-off campaigns from Zero Malaria Starts with Me ⁸("Countries"). There is no reason that Senegal's success in community programs cannot serve as a global leader in the path towards achieving the Sustainable Development Goals by 2030. Jeffrey Sachs writes that "Sustainability requires the leadership and responsibility of the private sector alongside the public sector and civil society" (2210). Senegal is the perfect

example of cooperation between civil society, the private sector, and government leadership that leads to success in sustainable development and global health.

Throughout the COVID-19 pandemic, Senegal has continued to lead in successful community health programming, even in a low-resource environment. In August 2020, *Foreign Policy Magazine* praised Senegal's COVID-19 response effectiveness, ranking the country second behind New Zealand (Shesgreen 4). The central pillars of Senegal's community health programming can be seen in its COVID-19 response. Once more, Senegalese celebrities have made a public commitment to popularizing a public health message. Popular music artists released a song about the importance of staying at home, washing your hands, and fighting the virus (de Sam Lazaro). Robust government leadership committed to providing a hospital bed for all citizens that test positive for the virus. Additionally, a government official from the Ministry of Health provides daily, transparent health updates about the new numbers of cases and any deaths from the previous day (Shesgreen 15). Private businesses have embraced security guards to check temperatures and provide hand sanitizer to shoppers (de Sam Lazaro). The strong sense of social responsibility is also very evident. Senegalese communities have taken ownership of the fight against COVID-19 and have committed to wearing masks without question (Shesgreen 19). Yet again, Senegal has proven to be a global health example through robust government leadership, commitment from the private sector, and community dedication to health.

Voices from all disciplines including sustainability specialists and health care practitioners are advocating for increased global health partnership. As Samuel Ruchman writes in "Why US Healthcare Should Think Globally," "Successful health care systems in low-resource settings are designed to target and serve the poor in ways that are contextually appropriate—addressing social, cultural, and economic barriers to care—and make efficient use

of limited resources” (Ruchman 738). Senegal has been extremely successful at addressing barriers to care using its limited resources to improve the health of its whole population. In the midst of the COVID-19 pandemic that has clearly illustrated the importance of public health, Senegal has quietly led the world in its response and should serve as a global model for contextually-appropriate community health campaigns. Ruchman contends that learning from global innovations like Senegal’s has “the potential to transform health care” (738). In a time where the entire world is facing complex problems in health, economics, and development, innovative minds from around the world must collaborate to develop groundbreaking solutions that work across all contexts. The Sustainable Development Goals prioritize global partnership, but in order for our partnership to be truly global, we must allow all contexts and regions to serve as examples in our path towards a more sustainable world.

Endnotes

¹ My translation. “Le but du Programme Qualité est de faciliter la création d’un environnement dans lequel les acteurs de système de santé savent ce qui doit se faire pour fournir les soins de qualité, qu’ils ont les compétences pour le faire, et qu’ils sont engagés le réaliser continuellement au cours du temps et avec les ressources disponibles.”

² My translation. “Le Programme Qualité n’est pas un programme vertical, mais un ensemble d’activités transversales dans lesquelles sont impliqués tous les programmes de santé et tous les niveaux du système de santé, y compris la communauté. L’assurance de qualité fait partie des devoirs de tout le monde ; aussi bien du niveau central qu’au niveau régional et district, dans les formations sanitaires, dans la communauté et les corps associés (ordre de médecins, pharmaciens, chirurgiens, dentistes, syndicats du secteur de la santé, etc.)”

³ My translation. “Au Sénégal, les communautés ont toujours joué un rôle essentiel dans la lutte contre le paludisme. [...] De plus, les systèmes communautaires constituent une plateforme cruciale pour élargir l’accès équitable aux soins de santé. [...] L’élimination du paludisme nécessite l’engagement de tous.”

⁴ The nine countries in the Ouagadougou Partnership are: Senegal, Mauritania, Guinea, Mali, Burkina Faso, Côte d’Ivoire, Niger, Togo, and Benin (“The Partnership”).

⁵ An imam is a Muslim community leader. They lead prayer in mosques and offer wisdom to guide communities.

⁶ My translation. “Depuis, elles sont devenues la figure de la mobilisation sociale, de la femme modèle... d’ailleurs, elles sont invitées à chaque journée de la femme, où elles font figures d’hôtes d’honneur.”

⁷ My translation. “reconnue par la société pour son leadership, son charisme, sa discrétion “

⁸ These 11 countries are: The Gambia, Cameroon, Zambia, Uganda, Mozambique, Niger, Sierra Leone, Ghana, Ethiopia, Mauritania, and Eswatini.

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