

Repairing the Public Health Crisis in Venezuela

By Vanessa Catalano

Author Bio

Vanessa Catalano, a junior at Marymount High School in Los Angeles, has an unwavering commitment to the fusion of public health advocacy and her Latin heritage. Her participation in her school community is evident through her leadership and active involvement in many activities. Vanessa is the co-founder and co-president of the Pre-Med Club, contributes to the school newspaper as a features section editor, and is a player on the varsity volleyball team. She amplifies her connection to her Latin roots as a writer for her school's Spanish newspaper. Additionally, she further explored and gained insights into her passions through an internship with a plastic and reconstructive surgeon. This diverse range of experiences supports her pursuit of addressing and repairing the public health crisis in Venezuela.

Abstract

Venezuela is struggling with a multifaceted crisis encompassing political, environmental, economic, and health issues. The healthcare system in Venezuela, known as Barrio Adentro, is in decline, leading to the deterioration of the health and well-being of its citizens. These harmful causes include low immunization rates, water contamination, and the effects of droughts, in addition to the corruption of their government. Following these root issues, this paper explores these challenges in Venezuela's healthcare system and proposes solutions aimed at improving public health in Venezuela. These proposals include the introduction of a water and food stamp program, the allocation of a reserved amount of clean water for hospitals, increased transparency in government spending, the mass production of drought-resistant crops, water recycling initiatives, and the expansion of filtration systems. The degradation of Venezuela's healthcare system is alarming, and the responsibility for implementing positive change rests upon the global community. The solutions in this paper serve as a foundation for revitalizing the healthcare system and emphasize the urgent need for intervention and reform. Ultimately, these efforts will promote and lead to better health and quality of life for Venezuelan citizens.

Keywords: Venezuela, Public health, immunization, water contamination, droughts, health crisis, environmental crisis, Barrio Adentro, disease, economic collapse

Introduction

Government corruption, economic collapse, and climate-induced environmental disasters have led to a severe public health crisis in Venezuela. Addressing this crisis necessitates comprehensive reforms in health-related policies and increased investment in Venezuela's free healthcare system. Despite possessing the world's largest oil reserves and being a major oil exporter, fewer than 2% of the workforce is employed by this industry (Caraballo-Arias, 2015). The plummeting price of oil since 2014 as well as political and economic instability have pushed Venezuela into an economic recession (Caraballo-Arias, 2015). 48% of Venezuela's population is living in extremely poor, dire conditions (Caraballo-Arias, 2015). In addition, Venezuela is also struggling economically and has a staggering minimum monthly wage of 130 bolivars or 5.40 USD (Singer, 2023).

Venezuela, a federal republic under the leadership of President Nicolás Maduro, faces criticism for its authoritarian style of governance. Venezuela's current healthcare system is known as Barrio Adentro and it was established by the Chávez government in 2003. However, it has come under scrutiny for its corruption and its lack of investments. Venezuela's current healthcare system is underfunded, understaffed, and has weak healthcare policies. This crisis is further exacerbated by a significant exodus of citizens and healthcare workers, with 10% of Venezuela's entire population becoming diaspora (Osorio, 2019). In addition to its healthcare system, Venezuela's hot and humid tropical climate and the dangers of water contamination have further caused instability within the nation through droughts, resource depletion, and the spread of waterborne diseases (World Bank Climate Knowledge Portal authors).

This paper serves as a literature review of public health in Venezuela, specifically focused on its failing health system Barrio Adentro, low immunization rates, water contamination issues, and the effects of droughts. This paper is also framed within the context of the United Nations Sustainable Development (SDGs) Goals with particular relevance to SDGs 2, 3.3, 3.9, and 13.2. SDG 2 emphasizes the need for an end to world hunger, and the need for improved food security, nutrition, and agriculture.

SDG 3 calls attention to promoting health and well-being for all ages, and 3.3 emphasizes ending epidemics like AIDS, tuberculosis, malaria, water-borne diseases, and others by 2030. SDG 3.9 talks about reducing deaths from water pollution and contamination. SDG 13 focuses on the urgency of combating the issues of climate change, and 13.2 highlights integrating climate change measures into policies and strategies (United Nations). The primary objectives of this paper are to critically assess Venezuela's current healthcare crisis and propose viable solutions to aid this nation.

Methodology

In this paper, Google Scholar served as the primary search engine and there were 24 literary references. A substantial portion of the information was derived from *The Lancet*, a reputable medical journal founded in 1823. The significance of *The Lancet* lies in its focus on addressing urgent, medical concerns in our society.

Additionally, the Center for Strategic and International Studies (CSIS) offered valuable research for this paper. This source was beneficial because it was comprehensive research and relevant statistics that directly aligned with the themes addressed in the paper.

The research methodology encompassed a critical analysis of the existing flaws and detriments of the current Venezuelan healthcare system, Barrio Adentro. Through an extensive review of scholarly literature and data, solutions were explored with the aim of effectively enhancing and improving the overall health and well-being of the Venezuelan population.

Discussion

Venezuela's healthcare system, Barrio Adentro, is failing and misleading its citizens through a lack of a promised investment in its healthcare system and corruption. It was meant to redress social inequities and revolutionize healthcare experiences; the program also gave access to free primary and preventive health services by creating thousands of neighborhood clinics staffed by Venezuelan and Cuban medical workers. Barrio Adentro was rooted in poor communities and relied on neighborhood

activists to start clinics and its doctors were celebrated for their solidarity with poor patients (Amy Cooper & Oscar Feo, 2022). However, soon this system began to decline. Funds that were destined for the construction of hospitals and the purchase of medicines disappeared. Even though millions of dollars were invested in the healthcare system, all hospital interventions, from surgeries to laboratory tests, were reduced by 75% between 2005 and 2011. Furthermore, according to estimates from NGO Transparencia Venezuela, at least \$29.7 billion was spent between 2005 and 2014, but this investment is not apparent in the quality of Venezuela's healthcare (Galbadón, 2018). According to the National Hospital Survey, there was a 47% shortage of supplies in emergencies and a 72% shortage of supplies necessary for operating rooms in the first half of 2022 (Barbar et al., 2023). Additionally, ENCOVI data matches with off-the-record reports that claim that over 80% of the 13,496 popular clinics acknowledged by the government in 2017 were closed, and as of 2017, only 1,094 of the supposed 30,000 Cuban doctors in Barrio Adentro remained in Venezuela. Moreover, there has been a 50% drop in medical staff because healthcare professionals, scientists, and professors are leaving Venezuela and disease infections have skyrocketed due to shortages of essential drugs (Osorio, 2019; Hotez et al., 2017).

In line with Sustainable Development Goal 3, which emphasizes promoting health and well-being for all, a feasible solution would be for the government to actually invest the money they proposed to the Venezuelan healthcare system, Barrio Adentro, and be held accountable for the correct amounts owed by providing evidence of the transactions. This would be effective in improving healthcare in Venezuela because it would allow the system to have funding for essential supplies, vaccines, and a clean water supply. In addition, it would force the government to be held accountable for their spending, so they could no longer mislead Venezuelan citizens through a lack of transparency.

The dire healthcare statistics further emphasize the urgency of reform. In 2019, there were 467,421 cases of malaria in Venezuela, which was a 1200% increase compared with the year 2000; and in 2017, Venezuela's low immunization coverage contributed to outbreaks of diphtheria and measles (Galbadón-Figueira et al., 2021). Additionally, over

100,000 Venezuelans have HIV but lack the necessary anti-retroviral medicine for treatment. The lack of necessary drugs and vaccines in Venezuela can cause the resurgence of yellow fever, dengue, vector-borne parasitoses, and death. Venezuela has already taken steps in the right direction through accepted support in the form of medical supplies and COVID-19 vaccines from allies like Cuba, China, and Russia (Bliss and Burke, 2022). Furthermore, there are many United Nations agencies, like UNICEF and PAHO, that operate in Venezuela. They offer guidance and support to social service agencies and government health (Bliss and Burke, 2022).

However, Venezuela needs even more assistance, in the form of accepting help from other countries and NGOs, or non-governmental organizations. For instance, the US reports that it provided at least \$80 million to support NGOs and international organizations, specifically related to improving and delivering water, sanitation, and hygiene (Bliss and Burke, 2022). Another instance is Peru, which wanted to send drugs and food to Venezuela, but were rejected out of Maduro's fear of being viewed as a failing government (Casey, 2016). Thus far, Venezuela has also refused help because Maduro and the government believe that it would allow the United States and other governments they view as hostile to have an opportunity to influence Venezuelan citizens. Therefore, they put political control over their population's health. Accepting this help would give Venezuela access to necessary treatments and vaccines without causing further financial devastation and turmoil. For instance, Venezuela needs anti-retroviral medicine for HIV treatment, and accepting help has a better chance to provide that. This would be crucially effective in Venezuela because currently, Venezuela has one of the lowest rates of routine immunization coverage, and it shows in their elevated cases of disease (Bliss and Burke, 2022). Therefore, expanding the availability of vaccinations by gaining vital supplies would improve public health drastically.

In 2018, the United Nations Food and Agriculture Organization recognized that climate change has had a significant effect on agriculture and food security, and according to the Ministry of Electricity, Venezuela's rainfall has measured 50 percent to 65 percent lower than normal (Graterol, 2023) and (Schneider, 2016). Production of

agriculture, including main crops like rice and corn, has plummeted to approximately 60% within the last 20 years and thus, has driven inflation higher (Rendon et al., 2019). This fall in agricultural production was followed by a significant nationwide weight loss of 24 pounds in 2017 (Osorio, 2019; Rendon, 2019). In addition, in 2019, the United Nations World Food Programme determined that 92% of the Venezuelan population suffered from food insecurity, primarily due to hyperinflation rendering the basic necessities of groceries unaffordable (Otis, 2022).

A focus should be placed on prioritizing the mass production of drought-resistant crops. This would create more foods without hindrance from droughts and a lack of water, and they could be mass-produced to help feed the immense population without costing people a high percentage of their money. Some of these foods that are best for drought tolerance are lima beans, corn, quinoa, and squashes (Peyster). Moreover, I propose the idea of creating policies that add food stamps as a part of the government's duty in Venezuela, like the food stamps system in the United States. I believe after accepting help and supplies from other countries, Venezuela should supply its lower to no-income citizens with food stamps. These stamps are government-issued coupons that are redeemable for food and given to those in dire need of these necessities. These solutions align with the United Nations' Sustainable Development Goal 2 through the promotion of eradicating hunger, improving sustainable agriculture, and an end to food insecurity for all.

Even though Venezuela is among the top 15 countries in renewable fresh-water resources, Venezuela has a failing water supply system, stemming from a lack of investment in infrastructure, corruption, and failed government policies (Rendon et al., 2019; Scull, 2020; Rendon, 2019). According to the NGO Agua Sin Fronteras, 82 percent of Venezuela's inhabitants are exposed to the consumption of unsafe water due to inoperable water treatment plants, and nearly 8 out of 10 Venezuelans don't have continuous access to clean water for basic sanitation and drinking (Graterol, 2023). The lack of clean water has also led to diarrhea, typhoid fever, tuberculosis, malaria, Zika virus, dengue, and hepatitis A (Hernández, 2029). Furthermore, 79 percent of operating facilities in Venezuela don't have any water access (The Lancet, 2018), and water contamination is leading

to an increase in infection from waterborne diseases, especially in children (Rendon, 2019). In Caracas, Venezuela's capital, the production of clean water depends on three systems of water treatment and pumping known as Tuy 1, Tuy 2, and Tuy 3, and together use 14 treatment plants and 147 pumping stations (Scull, 2020). Both Tuy 1 and Tuy 2 are at 50% capacity and the constant electric power shortages affect the function of the pumping system (Scull, 2020), thus reducing the supply of drinkable water to the population. In 1999, there were 20,000 liters per second of drinkable water in Caracas, but in 2019 there were only 14,000 liters per second. Since 1982, a fourth system, Tuy 4, has been under construction with hopes of creating clean water, but it has not been completed (Scull, 2020).

In response, repairing and building more wells in Venezuela and making this water drinkable through a filtration system allows for a nationwide base level of water across cities in Venezuela; thus, allowing more potable water to be distributed and used. In addition, Venezuela should implement policies of recycling water; rather than letting water run down the drain, water can be collected, cleaned, and run back through the system. This recycled water could be used for necessary processes like watering land and crops. Moreover, I believe it is critical that a certain amount of water should be reserved for hospitals across Venezuela. This would improve healthcare in hospitals for both patients and healthcare workers, leading to a cleaner and safer nation. Much like food stamps, I propose the idea of water stamps in Venezuela. These water stamps would also be coupons given out by the government to lower to no-income citizens would allow people to receive drinkable water, which is an absolute necessity. This approach to addressing Venezuela's water insecurity issues is in accordance with the United Nations' Sustainable Development Goals 13, 3.3, and 3.9. Through the improvement of water infrastructure, increasing access to clean water, and enhancing water management practices, these measures reflect the message of SDG 13 about combating climate, like water insecurity because of droughts. Additionally, these proposed strategies relate to SDGs 3.3 and 3.9 because they aim to curb the spread of diseases like malaria and tuberculosis, as well as reduce deaths from water contamination and pollution. Thus, these proposed policies relate to the global goal of reducing the burden of waterborne epidemics and promoting public health.

The pressing challenges facing Venezuela's healthcare system, water supply, and agricultural sector need urgent solutions that align with the United Nations Sustainable Development Goals; by addressing these issues, there is potential for improved healthcare, the alleviation of food insecurity, and the combatting of waterborne diseases.

Conclusion

Venezuela is in deep financial, environmental, migration, and health crises. The current healthcare system, Barrio Adentro, is leaving citizens in poor health, starvation, thirst, and vulnerable to disease, thus making their current healthcare system detrimental to their well-being. The Barrio Adentro system is not getting the investment it needs to be able to supply citizens with their fundamental needs, like vaccines and water. A solution would be to hold the government accountable for investing by showing the public the actual transactions with the correct amount of money originally proposed with the system, in other words, providing its citizens with a financial breakdown of government spending. This would lead to an increase in health and a rise in immunization rates due to an increase in resources such as vaccines and medication.

Moreover, another idea to improve immunization rates in Venezuela is accepting help from other countries and non-governmental organizations, specifically focusing on delivering water, and improving sanitation and hygiene. Accepting this assistance would be immensely beneficial because it would allow Venezuela to have access to fundamental supplies without causing further financial strain. This would save many lives, like people with HIV who can finally receive the treatment they deserve. Making vaccinations a more common practice would increase immunization rates because of new supplies and would improve health in Venezuela tremendously.

In addition to low immunization rates, Venezuela is also struggling due to the climate's effect of droughts. Some solutions are the mass production of crops that don't require a lot of water and irrigation, only soil, and food stamps to alleviate hunger and starvation rates. This would be effective in Venezuela because it would lead to the mass

production of more foods that are currently overpriced and becoming a luxury, and it would feed and nourish more Venezuelans, many of whom are struggling from starvation. Furthermore, water and food stamps would be immensely effective in Venezuela because they would provide people with essentials that they are dying without. This would improve starvation and dehydration rates, and save lives in Venezuela.

Additionally, improving the issue of water contamination would immensely benefit the Venezuelan population. I propose repairing and building more water plants in Venezuela and filtering them to allow for an increase in water production, and the recycling of water to be used for necessities like growing crops. Moreover, it is critical that a significant amount of water should be reserved for hospitals across Venezuela because both patients and healthcare workers are in dire need of this implementation.

Citizens, both adults and children, are suffering and dying because they are stuck in a broken healthcare system, which they can't control. The dire state of Venezuela's public health system calls for a multifaceted approach with solutions that not only address immediate concerns but also align with the broader objectives of the United Nations Sustainable Development Goals. The relevance of this paper lies in its potential to alleviate the suffering of the people of the Venezuelan population through the repairing of the Barrio Adentro health system and fostering a healthier future for Venezuela.

References

Aponte, C. (2018). Misión Barrio adentro: Atención Fracturada y salud en crisis.

<https://transparenciave.org/wp-content/uploads/2018/06/2018-Mision-Barrio-Adentro-Version-TV-completa-1.pdf>

Barbar, R., Rojas, I., & Chirinos, M. (2023, February 1). Exposing inequalities: How the health care system failed in Venezuela. Pulitzer Center. <https://pulitzercenter.org/projects/exposing-inequalities-how-health-care-system-failed-venezuela>

- Bello, R. J., Damas, J. J., Marco, F. J., & Castro, J. S. (2017). Venezuela's health-care crisis. *The Lancet*, 390(10094), 551. [https://doi.org/10.1016/S0140-6736\(17\)31831-7](https://doi.org/10.1016/S0140-6736(17)31831-7)
- Bliss, K. E., & Burke, M. (2022, October 14). Bridging the gap in immunizations and health services for Venezuelans at home and abroad. CSIS. <https://features.csis.org/immunizations-health-services-for-venezuelans/>
- Caraballo-Arias, Y. (2015). Occupational safety and health in Venezuela. *Annals of Global Health*, <https://www.sciencedirect.com/science/article/pii/S2214999615012382>
- Febres, C. E., Cardozo, A., Méndez, A., Sassone, P., Haljeimer, H., Polanco, L., ... & Contreras, J. (2002). La reforma de la seguridad social en Venezuela: bases y perspectivas. *Salud de los Trabajadores*, <https://dialnet.unirioja.es/servlet/articulo?codigo=2938700>
- Feo, A. C. and O. (2020, March 16). The rise and fall of barrio adentro. *NACLA*. <https://nacla.org/rise-fall-barrio-adentro>
- Gabaldón, J. C. (2018a, December 5). How barrio adentro wrecked Venezuela's health system. *Caracas Chronicles*. <https://www.caracaschronicles.com/2018/12/05/how-barrio-adentro-wrecked-venezuelas-health-system/>
- Gabaldón-Figueira, J. C., Villegas, L., Grillet, M. E., Lezaun, J., Pocaterra, L., Bevilacqua, M., ... & Chaccour, C. (2021). Malaria in Venezuela: Gabaldón's legacy scattered to the winds. *The Lancet Global Health*, 9(5), e584-e585. [https://www.thelancet.com/journals/langlo/article/PIIS2214-109X\(21\)00007-3/fulltext](https://www.thelancet.com/journals/langlo/article/PIIS2214-109X(21)00007-3/fulltext)
- Graterol, M. de los Á. (n.d.). Water and hunger: Venezuela's water crisis threatens Food Security. *Equal Times*. <https://www.equaltimes.org/water-and-hunger-venezuela-s-water>
- Hernández, A. R. (2019, April 30). "Why are you crying, Mami?" In Venezuela, the search for water is a daily struggle. *The Washington Post*. https://www.washingtonpost.com/world/the_americas/why-are-you-crying-mami-in-venezuela-the-search-for-water-is-a-daily-struggle/2019/04/04/39972ce4-5547-11e9-814f-e2f46684196e_story.html
- Hotez, P. J., Basanez, M. G., Acosta-Serrano, A., & Grillet, M. E. (2017). Venezuela and its rising vector-borne neglected diseases. *PLoS Neglected Tropical Diseases*, <https://doi.org/10.1371/journal.pntd.0005423>
- Osorio, A. W. (2019, January 14). How the Diaspora is helping Venezuela's migration crisis. *World Economic Forum*. <https://www.weforum.org/agenda/2019/01/how-the-diaspora-is-helping-venezuela-migration-crisis/>
- Otis, J. (2022, January 11). Why the kids of Venezuela aren't getting enough to eat. *NPR*. <https://www.npr.org/sections/goatsandsoda/2022/01/11/1071485460/why-the-kids-of-venezuela-arent-getting-enough-to-eat>
- Peyster, E. (2016, August). Drought-resistant Crops and Varieties. *University of California Agriculture and Natural Resources*. <https://ucanr.edu/sites/scmg/files/183771.pdf>
- Rendon, M., Schneider, M., Kohan, A., & Vazquez, J. (2019, December 10). Unraveling the Water Crisis in Venezuela. *Center for Strategic and International Studies*. <https://www.csis.org/analysis/unraveling-water-crisis-venezuela>
- Schneider, K. (2016, January 10). Venezuela Drought Aggravates Instability. *Circle of Blue*. <https://www.circleofblue.org/2016/world/venezuela-drought-aggravates-instability/>
- Scull, C. (2020, July 22). Dealing with a water crisis and a pandemic in Venezuela – interactions between water security and COVID-19. *Global Water Forum*. <https://www.globalwaterforum.org/2020/07/22/dealing-with-a-water-crisis-and-a-pandemic-in-venezuela-interactions-between-water-security-and-covid-19/>

Singer, F. (2023, March 7). Venezuelans struggle to survive on the lowest minimum wage in Latin America. EL PAÍS English. <https://english.elpais.com/international/2023-03-07/venezuelans-struggle-to-survive-on-the-lowest-minimum-wage-in-latin-america.html#:~:text=Venezuela's%20minimum%20monthly%20income%20is,poverty%20is%20%2457%20per%20month>.

The Lancet. (2018, April 7). The collapse of the Venezuelan Health System - The Lancet. [https://doi.org/10.1016/S0140-6736\(16\)00277-4](https://doi.org/10.1016/S0140-6736(16)00277-4)

United Nations. (2015). The 17 sustainable development goals. United Nations. <https://sdgs.un.org/goals>

Villalba, J. A. (2018). The challenges of restructuring health care in Venezuela. *The Lancet*, 10.1016/S0140-6736(18)31384-9.

World Bank Climate Change Knowledge Portal. Climatology | Climate Change Knowledge Portal. <https://climateknowledgeportal.worldbank.org/country/venezuela-rb/climate-data-historical>

Casey, N. (2016, 28 September). Concern as Venezuela Refuses to Accept Aid. *The New York Times*. <https://go.gale.com/ps/i.do?id=GALE%7CA464856020&sid=googleScholar&v=2.1&it=r&linkaccess=abs&issn=03624331&p=AONE&sw=w&userGroupName=anon%7E65bc698e&aty=open-web-entry>