What can the United States learn from Cuban Prenatal and Maternal Care? Challenges and Solutions

Henry Leighton

Wesleyan University

Professor Peggy Carey-Best

12 December 2024

What can the United States learn from Cuban Prenatal and Maternal Care? Challenges and Solutions

The United States has been referred to as "The Leader of the Free World" and the "Land of Opportunity." However, Americans are not free from the worry that their pregnancy might cost them their life: its maternal mortality rate is the highest of its developed peers at 22 deaths per 100,000 live births (Gunja et al 2024). Moreover, their healthcare system does not guarantee their children the opportunity to live, with an infant mortality rate of 5.4 per 1,000 live births (the sixth highest of countries in the Organisation for Economic Co-operation and Development) (Infant Mortality 2021). Nevertheless, the United States continues to spend the most out of any other country on healthcare (OECD Data Explorer 2024). With this data in mind, it is clear that new strategies for providing prenatal care in the United States must be explored in order to address the persistent disconnect between spending and healthcare outcomes. Indeed, the problem is worsening rather than improving; as Joseph et al (2024) found, maternal mortality rates have increased by 144% from 1999 until 2021. Although Joseph et al (2024) postulate that more deaths of pregnant people are identified than are associated with complications from pregnancies themselves, there are clearly documented disparities in maternal mortality that demonstrate that the American healthcare system is serving its patients unequally.

A prominent example of this phenomenon has been documented with respect to the health outcomes of Black women, who have almost triple the maternal mortality of their white peers (Craft-Blacksheare & Kahn 2022). Moreover, in the context of historically discriminatory laws and policies under slavery and Jim Crow, Black people are less likely to have access to generational wealth and thus less likely to be insurance holders and have full access to prenatal and family planning healthcare (Verma & Shainker). Moreover, the impact of these social

determinants lead Black women to be more likely to seek abortion on average, given that 75% of abortion seekers are low-income (Verma & Shainker). These disparities are particularly salient as Americans anticipate another term with Donald Trump as President of the United States, where the right to abortion will continue to fall under threat in the political sphere. Race as a socially constructed grouping of people presents a challenge for medicine, which is often preoccupied with the biological basis for illness and wellness, and can unwittingly contribute to a naturalization of race when the social determinants of health associated with racial identity are not accounted for because of the systemic racism and implicit bias that are present in American culture. As Craft-Blacksheare and Kahn (2022) write:

> Research on Black maternal morbidity and mortality reflects a shift in health research away from race as a biological determinant toward race as a social construct and away from individual behavior independent of social context toward structural determinants. Researchers have attributed high Black maternal death and morbidity rates to the association of race with negative social determinants of health, the environment in which people undertake everyday life activities, and the effects on health and quality of life. The social and economic consequences of racism in everyday life experiences, social structures, and health care institutions have been linked to poor maternal and infant outcomes. Researchers have also identified biological pathways through which racism and other forms of toxic stress directly impact maternal and infant health.

In order for research on racial disparities in medicine, it can not be limited to the brief mention of its relevance as a data point or demographic characteristic of a study population. Effective treatment strategies for serving Black women are not developed with only the acknowledgement that they are at a higher risk for negative health outcomes while giving birth. Physicians and

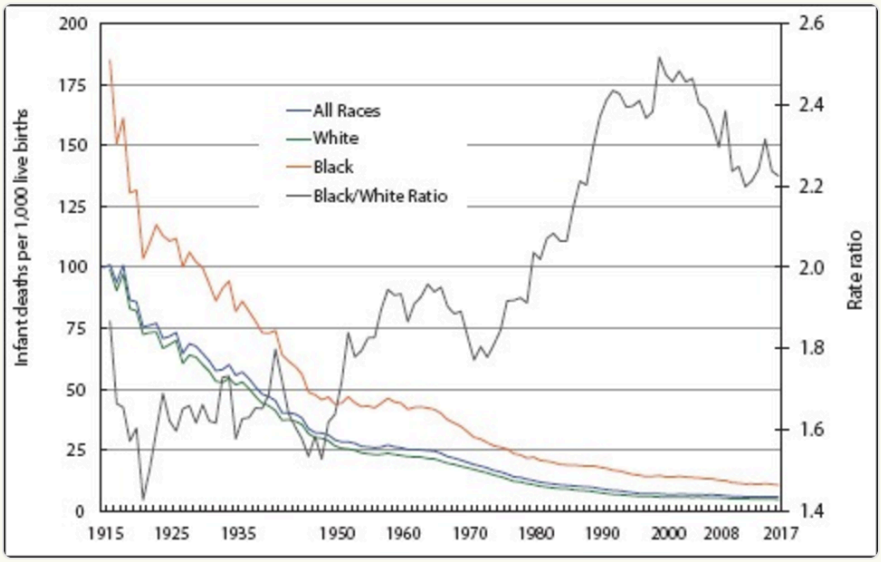
researchers must educate themselves about what it means to be a Black woman in America and how that social reality impacts their health and pregnancy.

Rather than simply noting that Black women are more vulnerable to negative health outcomes on average than their peers of other racial identities, we must delve into what treatment practices can best serve this population and address the social determinants that disproportionately impact their communities so that they can be healthy and thrive when pregnant. For instance, Wang et al (2023) suggest more proactive screening for hypertension and lifestyle factors related to heart disease. However, although these measures might help catch hypertensive disorders for middle class Black women with insurance, an increase in screenings might not be as effective for lower income people who might not be able to afford regular visits to healthcare providers due to budgeting restrictions and/or lack of insurance. Moreover, a fixation on the vulnerability of Black bodies can cause patients to feel that physicians are not sensitive to concerns about their health. As one Black perinatal health worker related with respect to the challenge that Black women experience when interacting with the American healthcare system, “the perception that women of color don't care about their health or the health of their babies, … do drugs, drink and engage in risky behavior … don't get prenatal care, the assumption that women of color are all in ill health anyway, so they are going to have sicker babies. People don't listen or act when women of color express their concerns!!” (Craft-Blacksheare 2022). All in all, the United States healthcare system is failing Black women.

An effective response to the United States’ relatively high infant and maternal mortality must account for the root causes of poor health outcomes for those who are most at risk. In order to do so, the United States must look beyond its cultural blinders and integrate medical practices that diverge from the economically privileged viewpoints that dominate our society. As shown

below in Figure 2, despite the medical advancements that have decreased infant mortality rates for Americans overall from 1915 until 2017, the racial disparities recorded in the ratio of these measures between Black and white Americans has only grown (Singh & Yu 2019).

Figure 2.



Given the prevalence of racial inequality in health outcomes for pregnant Black women and their children, it is clear that the current trajectory of United States healthcare is not working for these patients and that the provision of care must therefore be reevaluated so as to better serve Black Americans. Despite challenges in comparing the healthcare systems of the United States and Cuba due to the misleading nature of statistics, cultural differences, and misinformation, American physicians and policymakers can emulate the successes of the Cuban healthcare system and ensure reliable access to maternal and prenatal care for pregnant low income people and their children by expanding Medicaid to better cover midwife care and supporting culturally conscious treatment practices such as racially concordant care.

Despite the goals of the Cuban revolution in creating an equal society, Cuba has not been free of racial inequality, especially in the years of economic change following the fall of the Soviet Union. Because the country's planned economy and socialist policies were largely made possible by the monetary support of the Soviet Union as an ally and trade partner, when the Eastern bloc collapsed in 1989, the Cuban government lost a crucial pillar of its economy from which it has yet to recover (Hansing & Hoffman 2020). As a result, the island's economy scrambled to shift towards tourism, given that its imports and exports were limited by the United States' sanctions. These changes exacerbated existing social disparities among white and Afro-cubans from before the revolution. Because Cuba was colonized by the Spanish and enslaved labor was used to grow sugar on the island's plantations, the island's race relations developed similarly to those of the United States at first (Hansing & Hoffman 2020). After Cuba abolished slavery in 1886 and gained independence from Spain in 1902, racial inequality was maintained through policies and practices that prevented Afro-cubans from accessing employment opportunities to improve their socioeconomic status, which continued through the reign of US-backed military dictator Fulgencio Bautista (Hansing & Hoffman 2020). The historical discrimination against Afro-cubans laid the groundwork for present-day inequality in the tourist economy and private sector: white cubans held the properties that would prove most desirable to convert to rentals, shops and restaurants, while the disproportionately white Cuban diaspora abroad was poised to supplement generational wealth with remittances as startup capital (Hansing & Hoffman 2020).

Although racial inequality has intensified in Cuban society after the fall of the Soviet Union, before this economic shock the island had made strides to reduce disparities between white and Afro-cubans. For instance, as de la Fuente & Bailey (2021) write, the discrepancy in

life expectancy between white Cubans and Afro-cubans was reduced to one year in the early 1980's, a feat yet to be accomplished in the Land of the Free. Furthermore, as shown in figures A and B, Cuban measures of life expectancy have managed to keep pace with those of the United States until the COVID-19 pandemic, despite the vast difference in resources between the two countries (World Health Organization 2023, 2024).

Figure A

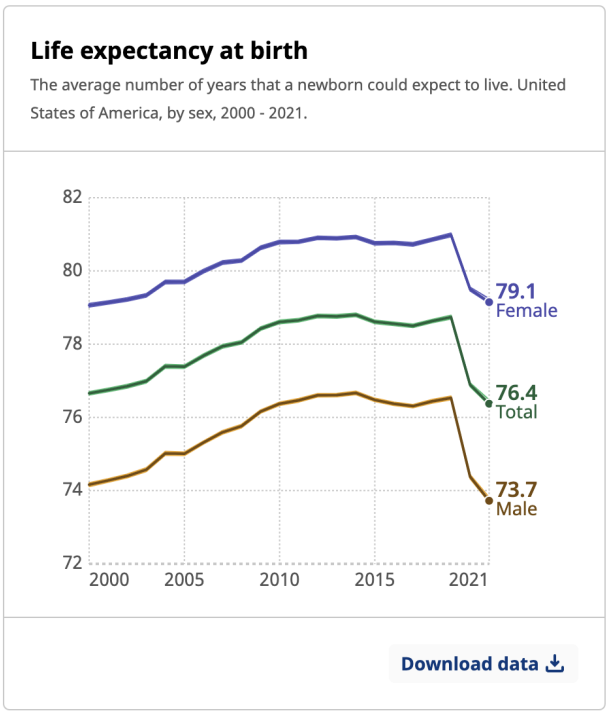
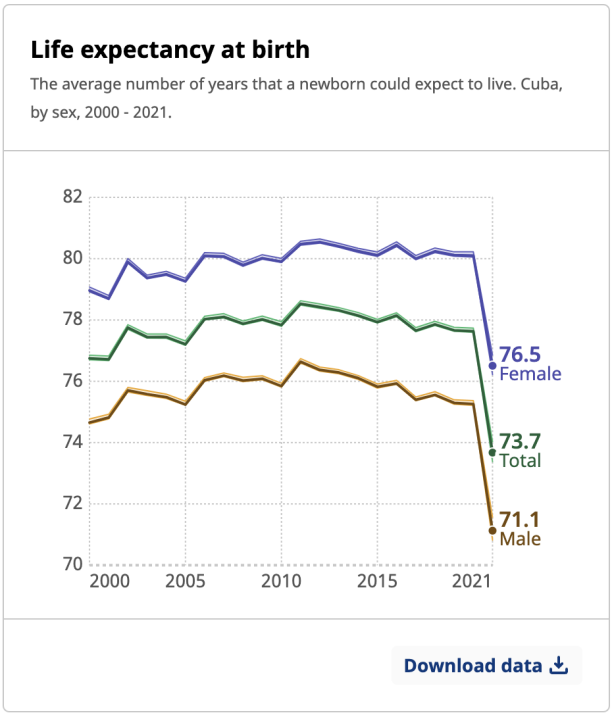
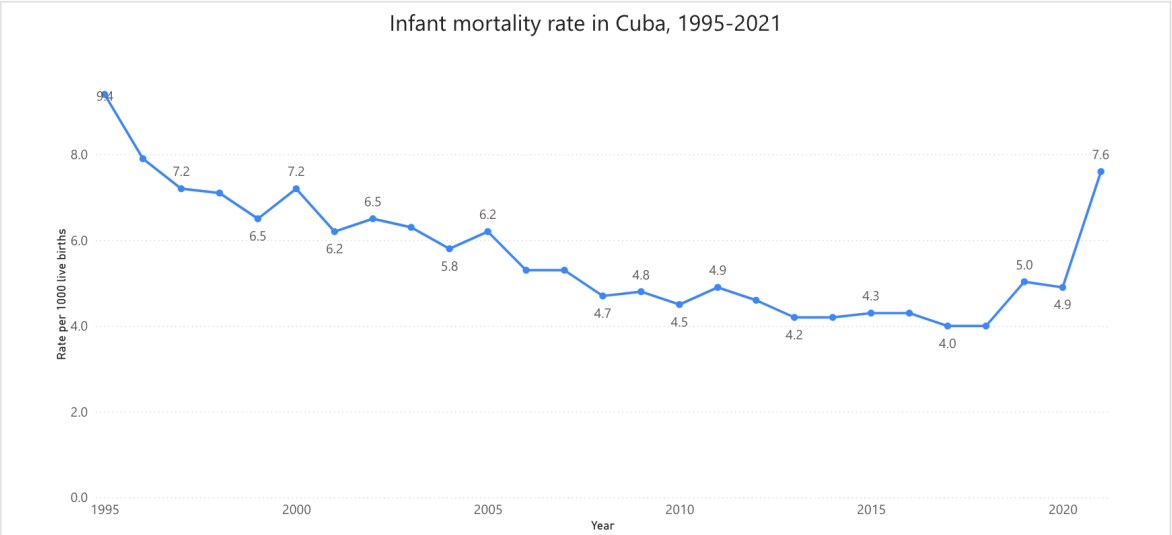


Figure B



Additionally, while the United States' infant and maternal mortality rates are some of the highest among its resource-rich peers, the Cuban equivalent of these measures are lower than most other countries in the Global South (Bragg et al 2012, Gunja et al 2024, Infant Mortality 2021). Moreover, although Cuba's infant mortality rate was higher than that of the United States at 7.6 deaths per 1,000 live births as shown in figure 4, it had been below that of its North American Neighbor throughout much of the 2000's (Aissaoui 2022, Cuba - Country Profile 2024, Dubus & Traylor 2014, Infant Mortality 2021).

Figure 4. Infant mortality per 1000 live births, 1995–2021



The statistics of Cuba's health outcomes do not reflect a perfect healthcare system and society, but their relative favorability in the context of the nation's limited economic resources make its systems worth examining in order to improve maternal and prenatal care in the United States.

However, the measure of infant mortality in particular has fallen under scrutiny by some scholars in the literature who allege that the Cuban government has influenced or falsified the data. For instance, Professor Katherine Hirschfeld states that during her nine months of fieldwork in Cuba at the end of the 20th century, she encountered evidence of medical repression and forced abortions (Hirschfeld 2007). Hirschfeld writes that she spoke with a doctor who provided evidence of these practices: “"What happens if an ultrasound shows some fetal abnormalities?" I asked. // "The mother would have an abortion," the doctor replied casually.

// “Why?” I queried. // "Otherwise it might raise the infant mortality rate”” (Hirschfeld 2007 pp 12). These allegations are difficult to prove or disprove given that they are predicated on the experiences of one fieldworker and her anonymous interlocutors. However, even if we accept that this case study is truthful, it does not support some of the claims that have been made by scholars who cite Hirschfeld’s account. For example, Berdine, et al (2018) cite Hirschfeld as their sole source to support their claim that “Physicians often perform abortions without clear consent of the mother, raising serious issues of medical ethics, when ultrasound reveals fetal abnormalities because ‘otherwise it might raise the infant mortality rate’” (pp 755). However, a single case study does not indicate a widespread phenomenon, and the doctor quoted by Hirschfeld does not directly imply that his statements apply to the entire healthcare system.

Other scholars have alleged that the Cuban government may inflate its infant mortality rate by neglecting to account for late fetal deaths, or by collecting data that is not representative of the entire population (Cooper et al 2006, Gonzalez 2015). Much of the literature surrounding Cuban maternal and prenatal health hinges on its infant mortality rate, without interrogating specifications of who constitutes an infant. Although Cooper (2006) acknowledges that Cuba adheres to the World Health Organization’s (WHO) stipulations for reporting infant mortality, WHO also presents infant mortality as a universal yardstick for comparing nations with varying sociocultural and economic determinants of health. Nevertheless, this paper is not concerned with definitively proving or disproving whether or not Cuba’s infant mortality rate is reliable or not. The World Health Organization (WHO) and Pan American Health Organization (PAHO) acknowledge this data on their reporting on Cuba, and the literature that challenges the validity of these measures is not robust enough to completely discredit the statistics produced by the Cuban government (Cuba - country profile 2024, World Health Organization 2024). As Cooper

(2006) writes, “Ongoing, careful scrutiny of Cuban public health data is justified and to be welcomed; however, sufficient data now exist in several key areas to demonstrate that skepticism can no longer be the basis for a refusal to engage ….” The cultural and economic differences that make transferring healthcare practices between the United States and Cuba difficult do not indicate that comparative analysis is fruitless. Rather, these differences suggest that Cubans and Americans have much to teach each other.

Although the evidence that Cuba’s infant mortality rate was once lower than that of the US is provocative, given the difference in resources and healthcare spending between the two countries, this paper does not see this variable measure as the primary imperative to examine its systems of maternal and prenatal health against those of the United States. In contrast, that its health outcomes are favorable given the country’s limited resources relative to the outcomes and similar economic challenges of its peers in the Global South suggests that its models could help guide initiatives that attempt to provide the best care possible for patients with limited incomes and access to insurance and the clinics with limited resources that serve them. Furthermore, Cuba’s health statistics are not the only indicator of the validity of its healthcare; As Aissauoi, et al (2022) note, the island’s international medical outreach is well-documented. Additionally, the United Nations acknowledged Cuba as the first country to end the transmission of HIV from mother to child within its borders (Caffe et al 2016). Given the widely accepted merit of the Cuban model of care within the international community, there is a reasonable basis for parts of its methodology being transferable to serving low-income and marginalized populations in the United States.

Indeed, the increase in infant mortality in recent years can likely be attributed to the crippling of the island’s tourist economy during tightened restrictions during Donald Trump’s

presidency and the COVID-19 pandemic, and not necessarily to Cuba's health methodology. The country's health system has long been under financial strain because of the United States' sanctions; as Drain & Barry (2010) write "The U.S. "Torricelli Bill" of 1992 tightened the embargo; the number of foreign-based subsidiaries of U.S. companies granted licenses to sell medicines to Cuba declined dramatically … Before Torricelli, Cuba imported U.S. $719 million worth of goods annually, 90% of which was food and medicines, from U.S. subsidiary companies" (pp 572). Hirshfeld (2007) writes that many of her interlocutors suggested that the Cuban government exaggerates shortages caused by the United States embargo through internal regulation of goods, and that the presence of an informal market of medical supplies makes it difficult to ascertain the exact impact of the embargo, though she notes that widespread scarcity of medical drugs and technology likely are owed in some part to the American government's sanctions. Again, because of the politically adversarial relationship between the United States and Cuba and the opacity of the island's government, it is difficult to prove or disprove these claims. Drain & Barry (2010) write that "By 1983, Cuba was producing >80% of its medication supply with raw chemical materials acquired from the Soviet Union and Europe," so it is reasonable to assert that Cuba never developed the capacity to be self-sufficient in its production of drugs, and that the United States embargo does have an adverse impact on Cubans' access to medical supplies (pp 572).

The extenuating economic circumstances of the United States embargo make Cuba's relatively favorable health outcomes particularly impressive. However, the uniqueness of the country's economic challenges make the country difficult to compare to its peers in Latin America, much less the United States. Although access to the resources of the American for-profit healthcare system are highly stratified depending on economic status, if a patient can

afford insurance and care they are unlikely to encounter the scarcity of medical technology and pharmaceutical drugs present throughout the Cuban healthcare system. Furthermore, the patient-centered care that sustains Cuba's model of preventive medicine is difficult to transfer to the United States, because regular visits to the doctor would increase medical bills, which would make such care inaccessible for the low-income and marginalized populations who are less able to afford insurance even as they are at greater risk for negative health outcomes. Certainly, although Cuba and the United States share a history of African slavery and policies that discriminate based on race, the two countries diverge with respect to cultural views surrounding this concept. While implicit bias in medicine is a well-studied phenomenon in the United States, it is expected in Cuba that primary care providers will have an established bond of trust and understanding because they live in community with their patients. Cubans tend to view people of different races as culturally homogeneous, referring to *color de piel* (skin color) instead of *raza* (race) to emphasize the superficial nature of phenotypic differences (de la Fuente & Bailey 2021).

These cultural differences are also reflected in public health interventions aimed at reducing inequality. Cooper, et al (2006) write that a 2001 study in Cienfuegos, Cuba, found there was no difference between preterm births of Afro-cuban and white infants, with the average birth rate also shown to be consistent. As de la Fuente & Bailey indicate, Cuban achievements in reducing racial inequalities in health outcomes after the revolution can be attributed to universal access to free healthcare. In addition to the different cultural attitudes with respect to socialist policies between Americans and Cubans today, the island had a unique opportunity to overhaul its healthcare system after the Cuban Revolution. As Cooper, et al (2006) indicate, after the revolution " … two-thirds of the 6300 physicians lived in Havana. 'Mutual aid' health facilities

served employed groups, especially in the cities, while primary care for the poor and rural population was weak or non-existent. By the mid-1960s 3000 physicians had left the island, primarily for the US …" (pp 818). With many health professionals fleeing the country after the Bautista dictatorship was overthrown, and a bare-bones health infrastructure, training incoming physicians on a novel healthcare methodology and restructuring the nation's medical system was necessary and facilitated by the conditions at the time. As a result, the following suggestions for public health interventions will draw upon existing proposals developed in the United States' cultural context that share guiding principles with the Cuban healthcare system, without attempting to change the fundamental framework of the American model of care.

One of the strengths of Cuban maternity and prenatal care is its streamlined organization of a variety of services in a way that is easily accessible for the patient. Mothers who are identified as at-risk for psychosocial or medical reasons are referred to Maternity Homes by their primary care providers/family doctors, where they receive care until they are transferred to a nearby hospital to give birth, after which they will receive postnatal care from their family doctor (Bragg et al 2012). Conversely, as Dubus & Traylor (2014) write, "Each pregnant patient is seen 12 times for perinatal checkups. The family doctor is responsible for prenatal, perinatal, and postnatal care of low-risk pregnant women" (pp 38). Maternity Homes provide pregnant mothers with a variety of services including free nutritionist-prepared meals, guided exercise, day-to-day visits from a doctor, family planning, and access to genetic and ultrasound examinations (Braggs et al 2012). Women that are eligible for inpatient care at a Maternity Home might exhibit a variety of risk factors, including "hypertension, diabetes, pre-eclampsia … anemia …under age 17, over age 35 … under/overweight … previous history preterm labor/Poor obstetrical history, women with previous multiple births … infectious diseases, drug use … and … discord with

spouse/partner/parents, homelessness, and poverty" (Braggs et al 2012 pp 13). In the case of maternal and prenatal care in Cuba, the organizational structure of medical offices prepares mothers for successful pregnancies.

Because visits to primary care providers are free, mothers can engage with services without economic concerns. Indeed, rather than being left unable to access medical services or saddled with medical debt, pregnant patients experiencing poverty or homelessness receive *higher* quality care because of their relationship to these negative social determinants of health. Furthermore, Cuba's network of family doctors are uniquely positioned to account for and observe biopsychosocial risk factors for pregnant women. According to Cooper et al, (2006), "By the 1990s the strategic goal was reached whereby a team of a family physician and a nurse lived on every block and provided care for 120–160 families. At present [2006] there are 31 000 family physicians, with a total doctor:population ratio of 1 : 170" (pp 818). A physician might see a patient smoking or overhear an argument between spouses while simply walking their dog, and become alerted to risk factors that their population may hesitate to report. Although calling for a one-to-one adoption of the Cuban system of family doctors would be overly idealistic, researchers such as Brown, et al (2023) have explored how screenings for social determinants of health could be put into practice in the American healthcare system. Because doctors in the United States typically do not develop the close relationships with patients that are facilitated by the position of Cuban family doctors, the implementation of screenings for social risks could help identify which patients need special attention.

The patient-centered continuity of care provided by Cuban family doctors ensures quick detection of social and medical risk factors, with established protocols for referring patients to intensive care in Maternity Homes, resulting in an integrated model of socially conscious

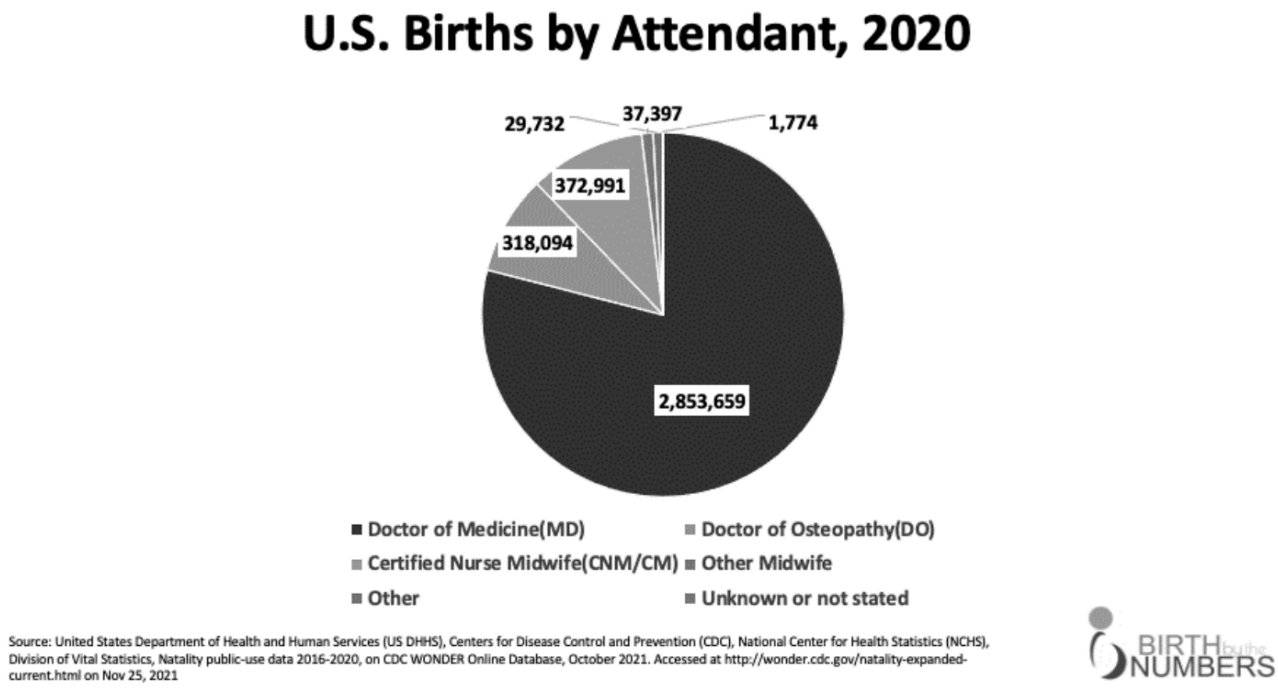
medical care. Some countries culturally and economically similar to the United States, such as the United Kingdom, have mobilized the services of midwives to bring more patient-centered care to the clinical setting. As Combellick, et al (2023) write: “in the United Kingdom, there is a midwife assigned to every childbearing individual, regardless of the risk status of the pregnancy. When the risk status elevates, the team expands to include midwifery plus the appropriate specialty, including, but not limited to, obstetrics and pediatrics” (pp 986). Cuban Maternity Homes do not employ the services of midwives, but as established earlier in this paper, interventions that do not necessarily mirror Cuban medical practices exactly could be effective at capturing the essence of the socially-conscious, patient-centered care that is practiced by family doctors as the backbone of the island’s medical system (Bragg et al 2021). Midwives are trained to support patient autonomy and remain conscious of social determinants of patients’ health (Combellick et al 2023, Kimball 2023). Although Berdine, et al, (2018) cite Hirschfeld (2007) to allege that Cuban physicians “will prescribe the forceful internment in a state clinic (casa de maternidad) so that they may regulate her behavior,” (a claim not supported by Hirschfeld’s paper), Bragg, et al (2012) affirm that patients may return home before giving birth and receive continuity of care from their family doctor unless they consent to return. Conversely, a 2019 study in the United States found that 17.3% of women seeking perinatal care “reported “mistreatment,” including being scolded, feeling ignored, having requests refused, and having forcible procedures without consent” (Combellick et al 2023 pp 989). Although Cuban physicians might expect that their pregnant patients have reliable support through long-standing relationships with family doctors, and thus deem the inclusion of midwives in Maternity Homes unnecessary, the literature suggests that midwifery practices could prove invaluable in improving prenatal care in the United States.

In addition to providing socially conscious care and advocating for patients' autonomy, the care of midwives also provides continuity of care. Under the midwife's model of care patients are seen more often during the pre and postnatal periods, allowing space for more identification of social and medical risk factors (Kimball 2023). This is particularly salient because ⅔ of maternal deaths occur outside of the moment of birth (Kimball 2023). Furthermore, continuity of care represents another important way in which the midwives model of care could emulate the successes of the Cuban model, as family doctors see their patients regularly throughout the perinatal period. This continuity of care is especially critical, as the United States' lack of paid paternity leave means leads to increased stress following childbirth, which has been tied to higher rates of adverse mental health outcomes and postpartum suicide for Americans (Kimball 2023). Moreover, similarities can be drawn between Cuban family doctors and midwives in the context of their shared home visit practices, which have been found to reduce the occurrence of factors associated with infant mortality: preterm and low-birth weight outcomes. Indeed, Kimball (2023) writes of the benefits of home visits that:

> This allows them to see the client's home and identify risk factors such as mold, bugs, rodents, or unsafe stairs … Many birthing people do not have a partner who is still on parental leave during their six-week visit. They may have to bring their infant and toddler to an appointment. Whether they are bringing just their baby or other children, they have to do heavy lifting in both situations when heavy lifting postpartum is not recommended. A midwife doing home visits would help avoid such situations. The birthing person will be less stressed if they avoid the arrangement of a babysitter or someone to drive them to the appointment (if they are not cleared to drive) (pp 83).

Given the well-documented, positive health benefits of midwives and home visits, it might seem surprising that their services are not already widely mobilized in the United States to improve maternal and prenatal care. Indeed, as shown in Figure 1, the majority of births in the United States are not attended by midwives (Kimball 2023). However, the underutilization of midwives in the United States is likely due to structural barriers.

Figure 1



Part of the problem with respect to underutilization of midwives may be their apparent lack of presence in the United States, brought on by policies and practices within the American healthcare system that makes it difficult for midwives and the facilities they operate to stay viable. For instance, while there is a ratio of 11 obstetricians per 1,000 live births in both America and France, the United States maintains a ratio of 4:1,000 with respect to midwives as opposed to France's 30:1,000 (Combellick et al 2023). Although there is a misconception that

midwives are being accessed by more privileged treatment seekers such as white women, as shown above, midwives can provide a variety of services that account for the social determinants of health of marginalized patients. Furthermore, their care is typically more affordable than that of more medicalized treatment plans (Combellick et al 2023, Kimball 2023).

However, although midwives are uniquely qualified to care for low-income and historically underserved populations, the Medicaid insurance for which these patients are more likely to qualify does not always cover their services (Courtot et al 2020). In their study of American birth centers run by midwives, Courtot, et al (2020) found that in 5 of the surveyed facilities, the Managed Care Organizations that coordinate medicaid reimbursement refused to network these birth centers on the grounds that their services were redundant. Additionally, when the services of midwives were eligible for coverage under Medicaid (which is are required to be covered by Medicaid), reimbursements were inadequate to cover costs or did not cover aspects of the midwives model of care, including doula support, childbirth education, lactation consultation, home births, and a full range of visits (Courtot 2020). These restrictions led some birth centers to place limitations on the number of Medicaid recipients they could accept, or deny them access altogether (Courtot 2020). Not only do these limitations make the care of midwives inaccessible to those who need it the most, but they also discredit the work of midwives by deeming a variety of their services inessential.

All in all, the numerous health benefits associated with the provision of the midwives suggests that their underutilization in the United States as well as within Cuban Maternity Homes may be a blindspot for both countries. Nevertheless, although they do not form a significant part of the Cuban healthcare system, the literature indicates that they are effective at emulating the practices and successes of the island's family doctors. Furthermore, another example of a

measure culturally specific to the United States that could emulate the close bond a patient forms with their primary care provider under the Cuban model of healthcare could be racially concordant care. According to Liese, et al (2022), racial concordance for Black pregnant women (when they are served by Black providers), was associated with halving racial disparities in infant mortality. Liese, et al (2022) propose a treatment strategy they call Melanated Group Midwifery Care, suggesting the implementation of " (1) racial concordance between Black midwives and patients, (2) group prenatal care, (3) nurse navigation, and (4) one year of in-home postpartum doula support." in order to address racial inequality with respect to maternal health outcomes for Black women (pp 697). Racially concordant care would likely be unpopular in Cuba, because the provision of special privileges or targeted policies to specific groups of people would go against the values of universal equality that emerged from the Cuban Revolution. However, as racial inequality increases on the island, such specialized policies may become more necessary. Indeed, despite all of the challenges associated with bridging the gap between Cuban and American culture, it seems that we have much to learn from each other. This paper has sought to focus on 'realistic' lessons and treatment proposals that can be inspired by the example of Cuba's socialist medicine. However, these efforts have continually come up against the prohibitively expensive nature of the American for-profit healthcare system. Ultimately, the greatest medicines and treatments are only as effective as their price tag is accessible.

In accordance with the Honor Code, I affirm that this work is my own and all content taken from other sources or assistance accepted from another person has been properly acknowledged.

Works Cited

Aissaoui, Nasreddine, et al. "The Effectiveness of Health Care Finance in Promoting Health: Does the Condition of Health Get Better by Spending More?" *The Pan African Medical*

Journal, vol. 42, June 2022, p. 95, https://doi.org/10.11604/pamj.2022.42.95.35133. Accessed 2 Nov. 2022.

Andaya, Elise. "Reproductive Governance in Practice." *Routledge EBooks*, Informa, Sept. 2021, pp. 123–36, https://doi.org/10.4324/9781003216452-10. Accessed 12 Nov. 2024.

Anthony, Elizabeth R., et al. "Examining the Causal Impact of Prenatal Home Visiting on Birth Outcomes: A Propensity Score Analysis." *Maternal and Child Health Journal*, vol. 25, Feb. 2021, https://doi.org/10.1007/s10995-020-03054-7.

Berdine, Gilbert, et al. "Cuban Infant Mortality and Longevity: Health Care or Repression?" *Health Policy and Planning*, vol. 33, no. 6, June 2018, pp. 755–57, https://doi.org/10.1093/heapol/czy033.

Bragg, Michelle, et al. "No Child or Mother Left Behind; Implications for the US from Cuba's Maternity Homes." *Health Promotion Perspectives*, vol. 2, no. 1, July 2012, pp. 9–19, https://doi.org/10.5681/hpp.2012.002. Accessed 18 Feb. 2021.

Brown, Jason, et al. "Considerations in Implementation of Social Risk Factor Screening and Referral in Maternal and Infant Care in Washington, DC: A Qualitative Study." *PloS One*, vol. 18, no. 4, Public Library of Science, Apr. 2023, pp. e0283815–15, https://doi.org/10.1371/journal.pone.0283815. Accessed 20 Apr. 2024.

Caffe, Sonja, et al. "Cuba Validated as the First Country to Eliminate Mother-To-Child Transmission of Human Immunodeficiency Virus and Congenital Syphilis: Lessons Learned from the Implementation of the Global Validation Methodology." *Sexually Transmitted Diseases*, vol. 43, no. 12, Dec. 2016, pp. 733–36, https://doi.org/10.1097/olq.0000000000000528. Accessed 4 Mar. 2021.

Combellick, Joan L., et al. “Midwifery Care during Labor and Birth in the United States.” *American Journal of Obstetrics and Gynecology*, vol. 228, no. 5, Mar. 2023, https://doi.org/10.1016/j.ajog.2022.09.044.

Cooper, Richard S., et al. “Health in Cuba.” *International Journal of Epidemiology*, vol. 35, no. 4, Oxford University Press (OUP), Aug. 2006, pp. 817–24, https://doi.org/10.1093/ije/dyl175. Accessed 10 Dec. 2024.

Craft‐Blacksheare, Melva, and Peggy Kahn. “Midwives’ and Other Perinatal Health Workers’ Perceptions of the Black Maternal Mortality Crisis in the United States.” *Journal of Midwifery & Women’s Health*, vol. 68, no. 1, Nov. 2022, https://doi.org/10.1111/jmwh.13433.

“Cuba - Country Profile.” *Health in the Americas*, Oct. 2024, hia.paho.org/en/country-profiles/cuba. Accessed 9 Dec. 2024.

“Cuba Data | World Health Organization.” *Data.who.int*, 2024, data.who.int/countries/192.

de la Fuente, Alejandro, and Stanley R. Bailey. “THE PUZZLE of RACIAL INEQUALITY in CUBA, 1980s–2010s.” *Du Bois Review: Social Science Research on Race*, vol. 18, no. 1, 2021, pp. 73–96, https://doi.org/10.1017/s1742058x21000060. Accessed 9 Jan. 2022.

Drain, P. K., and M. Barry. “Fifty Years of U.S. Embargo: Cuba’s Health Outcomes and Lessons.” *Science*, vol. 328, no. 5978, Apr. 2010, pp. 572–73, https://doi.org/10.1126/science.1189680. Accessed 22 Nov. 2019.

Dubus, Nicole, and Amy Traylor. “Comparative View of Prenatal Care between the United States and Cuba: Lessons for the United States?” *Journal of Human Behavior in the Social Environment*, vol. 25, no. 1, Oct. 2014, pp. 35–42, https://doi.org/10.1080/10911359.2014.953430. Accessed 30 Apr. 2020.

GONZALEZ, ROBERTO M. “Infant Mortality in Cuba: Myth and Reality.” *Cuban Studies*, no. 43, 2015, pp. 19–39. *JSTOR*, http://www.jstor.org/stable/24487269. Accessed 13 Dec. 2024.

Gunja, Munira, et al. “Insights into the U.S. Maternal Mortality Crisis: An International Comparison.” *The Commonwealth Fund*, 4 June 2024, www.commonwealthfund.org/publications/issue-briefs/2024/jun/insights-us-maternal-mortality-crisis-international-comparison.

Hansing, Katrin, and Bert Hoffmann. “When Racial Inequalities Return: Assessing the Restratification of Cuban Society 60 Years after Revolution.” *Latin American Politics and Society*, vol. 62, no. 2, Mar. 2020, pp. 29–52, https://doi.org/10.1017/lap.2019.59.

Hirschfeld, Katherine. “Re-Examining the Cuban Health Care System: Towards a Qualitative Critique.” *Cuban Affairs*, vol. 2, no. 3, July 2007, www.researchgate.net/publication/242567776_Re-examining_the_Cuban_Health_Care_System_Towards_a_Qualitative_Critique. ResearchGate. Accessed 10 Dec. 2024.

“Infant Mortality Rates.” *OECD*, 2021, www.oecd.org/en/data/indicators/infant-mortality-rates.html.

Joseph, K. S., et al. “Maternal Mortality in the United States: Are the High and Rising Rates due to Changes in Obstetrical Factors, Maternal Medical Conditions, or Maternal Mortality Surveillance?” *American Journal of Obstetrics and Gynecology*, vol. 230, no. 4, Elsevier BV, Mar. 2024, https://doi.org/10.1016/j.ajog.2023.12.038.

Kimball, Jess. “Reducing the Maternal Mortality Rate in the United States through the Midwives Model of Care.” *Journal for Prenatal and Perinatal Health*, vol. 37, no. 3, 2023,

apppahjournal.birthpsychology.com/wp-content/uploads/journal/published_paper/volume-37/issue-3/fUs9wOBH.pdf. Accessed 13 Dec. 2024.

Liese, Kylea, et al. “Melanated Group Midwifery Care: Centering the Voices of the Black Birthing Community.” *Journal of Midwifery & Women’s Health*, vol. 67, no. 6, Nov. 2022, pp. 696–700, https://doi.org/10.1111/jmwh.13438.

“OECD Data Explorer: Health Expenditure and Financing.” *Oecd.org*, 2024, data-explorer.oecd.org/vis?tm=United%20States%20healthcare%20spending&pg=0&snb=8&vw=tb&df. Accessed 7 Dec. 2024.

Singh, Gopal K., and Stella M. Yu. “Infant Mortality in the United States, 1915-2017: Large Social Inequalities Have Persisted for over a Century.” *International Journal of MCH and AIDS (IJMA)*, vol. 8, no. 1, Mar. 2019, pp. 19–31, https://doi.org/10.21106/ijma.271.

Verma, Nisha, and Scott A. Shainker. “Maternal Mortality, Abortion Access, and Optimizing Care in an Increasingly Restrictive United States: A Review of the Current Climate.” *Seminars in Perinatology*, vol. 44, no. 5, Aug. 2020, p. 151269, https://doi.org/10.1016/j.semperi.2020.151269. Accessed 13 Oct. 2020.

Wang, Siwen, et al. “Maternal Mortality in the United States: Trends and Opportunities for Prevention.” *Annual Review of Medicine*, vol. 74, no. 1, Jan. 2023, pp. 199–216, https://doi.org/10.1146/annurev-med-042921-123851.

World Health Organization. “United States of America Data | World Health Organization.” *Data.who.int*, 2023, data.who.int/countries/840.