"Pero significa acaso que el socialismo todo lo hace mal? Y nuestros servicios de salud? Nuestro índice de mortalidad infantil de menos de 11, entre los mejores del mundo? Nuestras perspectivas de vida? Las enfermedades que hoy curamos y que no se curan en otros países?... El capitalismo no podrá cantar Victoria durante por mucho tiempo; no, no podrá.” -Fidel Castro Ruiz

Cuba poses an interesting paradox: it is a third world country with limited resources and technology, yet it has a health care system which has been able to produce positive outcomes comparable to developed countries. Currently, it has lowered it's infant mortality rate (number of infant deaths (one year of age or younger) per 1000 live births) to 4.4 deaths per 1,000 live births- that is lower than its North American neighbors: the United States at 6.8, and Canada at 5.3, and almost on par with most European countries. However, Cuba’s maternal mortality ratio is estimated to be 53 (deaths per 100,000 live births) - more than double that of the United States (24) and quadruple that of Canada (12). While low compared to other Latin American countries and similar economies, it stands well above the maternal mortality ratio of developed countries. What, if anything, is the cause of this disparity, and what may it imply?

My research began with La Realidad de lo imposible: La Salud Publica en Cuba and La Lucha por la salud en Cuba , which provided information on the
historical background for the Cuban health care system. The system has had three distinct periods of development. From the inception of the revolution led by Fidel Castro in 1959 until October 1960, there was an exodus of Cuban doctors and other medical professionals to other countries due to the change in the political climate. The 1960s brought institutional changes, including the creation of regional and provincial health organizations and hospitals, the formation of nationalized health offices, as well as the formation of polyclinics, and dental clinics. There were also several vaccination campaigns, helping to successfully eradicate diseases such as polio and malaria. In addition, ten research institutes were formed by the Ministry of Public Health, or MINSAP (Ministerio de Salud Publica). The 1970s brought strategic programs aimed at the development of mental and elderly homes, and maternal and infant care.

The Cuban health care system is a thoroughly organized network beginning intimately at the local level of family doctors who collaborate with the local polyclinic. The polyclinics report to health organizations at the municipal level, who report to health organizations at provincial level. Finally, at the top of the hierarchy at the national level is the government's MINSAP.

Clearly, one of ways Cuba has leveraged its scarce resources is by increasing its medical doctors and practitioners, and providing an extensive framework of support and accountability. This human capital has been most effective at enforcing preventative care due to limited access to expensive medicines and technologies.
The focus on maternal health begins early, as soon as a woman reaches reproductive age, she is automatically scheduled for a “preconceptional reproductive risk consultation” with her primary physician, during which her medical history is assessed for any perceived risk factors. When a woman becomes pregnant, she is automatically under the surveillance of her physician, as well as arguably the most successful program in Cuban health care, PAMI (Programa de Atención Médica Integral), the national mother-child health care program. The program enlists the aid of not only physicians, who work regularly with the mother to ensure a healthy pregnancy and safe delivery, but also non-medical institutions that contribute indirectly, e.g. agricultural cooperatives are obligated to make food donations to maternity homes. If a woman is considered to have a high-risk pregnancy (due to various health concerns or environmental hazards), she is sent to live in a maternity home for a certain amount of time, even the entire duration of their pregnancy, as determined by her physician. Once admitted, pregnant women are restricted to only light activity, rest, and are observed carefully by medical staff. Pregnant women cannot enter or exit the facility without permission.

Since this research project was concerned with maternal mortality, it was important to observe any trends in any relevant health statistics, and across time periods. The obvious question is whether Cuban health statistics are reliable.
According to the World Health Organization, Cuba falls under the category (the category is “Group A, civil registration characterized as complete, with good attribution of cause of death”) of nations who have adequate sources for obtaining maternal mortality data. Most data is collected in the form of household surveys, vital registration, indirect sisterhood method, direct sisterhood method, reproductive age mortality studies (RAMOS), census, and verbal autopsy (although the data is said to be cross-referenced for accuracy, it should be noted that due to the hierarchy of health organizations, all information is eventually reviewed by MINSAP).

In the International Statistical Classification of Diseases and Related Health Problems, Tenth Revision, 1992 (ICD-10), WHO defines maternal death as: “the death of a woman while pregnant or within 42 days of termination or pregnancy; irrespective of the duration and site of the pregnancy, from any cause related to or aggravated by the pregnancy or its management but not from accidental or incidental causes.” Maternal deaths are divided into two groups: direct obstetric deaths and indirect obstetric deaths. There are also two distinct measurements for maternal death. Maternal mortality rate (MMR) is considered the number of maternal deaths during a given time period per 100,000 women of reproductive age during the same time-period. Maternal mortality ratio (MM), is the number of maternal deaths during a given time period per 100,000 live births during the same time-period.
In order to further analyze the disparity, the collection became a prime resource to understand the historical and social aspects of Cuban health care. The legalization of abortion in Cuba in 1965, has had a profound affect on family planning. The abortion rate reached its peak in 1986, when almost 97 out of every 100 live births were aborted. An interesting explanation for the abortion culture was found in La Fecundidad since receiving an abortion is easily accessible and free, it is believed that this has caused Cuban women, particularly adolescents, to have an ambivalent attitude toward abortion as a method of contraception. Since then, abortion rates have dropped to previous 1970s levels. However, according to one report in Salud Reproductive en Cuba, this decrease may be intentional, as after 1986, polyclinics assisted with menstrual regulation through the use of uterine aspiration- a nontraditional form of abortion which reduces the chance of pregnancy by 50% - and therefore, may have not been included in the abortion rates of the following years.

This hyper-focus on improving the infant mortality rate appears to be politically motivated. So far, it appears as if the Cuban government has used their achievement as an ideological tool, bringing largely positive international acclaim as well as further convincing many of the Cuban people that the revolution has been a success. In the opening quote made by Fidel Castro during a meeting of the FEU (Federación Estudiantil Universitaria) congress in December of 1990, he described Cuba’s infant mortality rate as among the lowest in the world, and
simultaneously defended socialism while boldly stating that capitalism could claim victory for much longer.

In short, the underlying problem is that pursuing this single health indicator, the rest of the health care sectors are often neglected. The higher than expected maternal mortality ratio seems to imply that less resources are aimed at the health of the mother, perhaps even less so after the birth of their child(ren). It has been proposed that Cuba’s health care model could serve as an example for both undeveloped and developed countries (one popular, and highly controversial, proponent has been Michael Moore’s documentary “Sicko”, in which he takes several American patients to Cuba to receive “better” health care in the form of affordable and universal coverage in response to the abusive American health care system). While certain aspects of the system may well be applied and successful, the sustainability of it is questionable. Since much of the success of the Cuban health system has relied on strong government influence, the autonomy of medical professionals and patients is highly compromised. In current medical ethics, many countries value a doctor-patient relationship that is based on shared decision-making, as well as privacy.

The most intriguing part of this research effort was looking beyond the numbers and being able to contextualize the relationship between maternal mortality and infant mortality within the history of Cuban health care. The diligence with which the Cuban government has prioritized infant mortality and used it to its advantage is remarkably clever. However, I have also found that the most important message is to not glorify a statistic without looking at the context
and circumstance in which it is gathered. In the case of Cuba, my hope is that individuals will still their acclamations just long enough to do their own research before declaring its health care system is an overwhelming success.
Bibliography


