

FILLING MORE CASKETS THAN CRIBS: A COMPARISON OF INFANT MORTALITY IN MILWAUKEE AND COSTA RICA

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Introduction

Milwaukee is now ranked as the 7th highest in infant mortality rate of 53 of the largest cities in the U.S. IMR in Milwaukee as of 2012 is 9.6 per 1,000 live births.

Top three reasons for infant mortality in Milwaukee:

- Premature birth
- Birth defects
- SIDS (sudden infant death syndrome)/SUDI (sudden unexpected death in infancy)

There are few cross-national studies analyzing infant mortality rates focusing on health concerns with a developing country versus a high risk city such as Milwaukee; therefore, this research will compare Milwaukee and Costa Rica on infant mortality rates. Significant disparities between blacks and whites subsist for which blacks have substantially higher infant mortality rates than whites. Several studies have determined factors such as poverty, single parenting, living in a dangerous neighborhood, and discrimination, as factors that lead to high levels of stress. It is important to acknowledge stress triggers that are leading to high cortisol levels, which are associated with preterm births. Stress can induce physiological changes or cause unhealthy behaviors such as smoking, drinking, use of drugs, and violence. Consequently these stress triggers and results can lead to congenital abnormalities for the baby like heart defects, in addition to the possibility of a preterm birth. Another cause of Milwaukee infant deaths are sleep-related reasons. Economic change associated with deindustrialization, are elements which play a role in the issue of sleep-related reasons. These issues are addressable, preventable and thus, unacceptable.

Infant mortality rates: calculated as the number of deaths of infants under the age of one year in a given year per 1,000 live births in the same year.

Background and Significance

~Milwaukee rates are worse today than most of the country's most troubled regions. This was not always the case. Prior to the 1960's, during a time when Milwaukee experienced high industrialization and a well-off economy, the city's infant mortality rates were one of the best in the country. Costa Rica has had similar infant mortality rates as Milwaukee until the mid-2000s when Costa Rica's rate improved and Milwaukee's rate dropped (Figure A). Costa Rica is a contrast with Milwaukee as it has implemented social programs which have contributed to accomplishing its lowest infant mortality in history as of 2012 (Costa Rica News, 2013). Costa Rica's infant mortality rate is now lower than Milwaukee's rate.

~An analysis controlling for race will reveal new contributing factors such as economic change leading to high infant mortality rates. This is my first hypothesis although considering the wide gap between blacks and whites in Milwaukee along with the diverse Costa Rican population of immigrants and indigenous, excluding race may be inevitable.

~Stressors for blacks are triggered by factors experienced everyday such as discrimination, financial hardships, living in a dangerous neighborhood, and high rates of incarcerations dense within the African American community. While this is a factor that most likely contributes significantly to high infant mortality rates amongst blacks, I will explore other potential reasons behind such high rates that are yet to be acknowledged or considered.

~Final hypothesis states that infant mortality in Milwaukee is due to preventable causes. Revealing new factors about infant mortality rates can help tackle the shockingly high rates with policy intervention that address broader economic factors.

Methodology

~ The comparative case study will use qualitative and quantitative data. The comparison will begin with analyzing Costa Rica and its infant mortality rates. Ironically, socioeconomic factors had the least impact on the infant mortality rate decrease in Costa Rica. In Milwaukee, by contrast, deindustrialization played a significant role. I examine the changes made by Costa Rica that explains the decline after the 1970's.

~ I then research Milwaukee's history of infant mortality rates to match the same time frame as Costa Rica's to determine its patterns from the fluctuating rates.

~ An attempt to draw inferences is made based on the studied social factors that are contributing to the top three causes of high infant mortality. My research begins to unfold once I start to make comparisons between the circumstances in Costa Rica and Milwaukee.

~ I compare the region's: socioeconomic factors, health policy, community participation, employment levels, individual attitudes, and health literacy, which is the strongest health status predictor more than age, income, education level, or racial group ("CDC," 2013).

~ Secondary and primary sources: *Milwaukee's Journal Sentinel*/ongoing series "Empty Cradles," conducted interview with *Milwaukee's Journal Sentinel* reporter Crocker Stephenson, census data, articles by Costa Rican authors such as Costa Rica's Heath Ministry, the book *Understanding Health Policy*, and websites like that of the Milwaukee's City Health Department, to collect statistical information.

Results

Milwaukee and Costa Rica's infant mortality rates were close in the 1970's and not at their highest. Succeeding the 1970's and into the 1990's, infant mortality rates rose for both regions. The differences commenced when Costa Rica took action and addressed the high rates. Costa Rica's efforts towards social stability successfully reached its lowest infant mortality rates in 2009 and once again in 2012. Today in 2013, Costa Rica has its lowest infant mortality rate in history at 8.51 deaths per 1,000 live births. This study found distinct factors involved with infant mortality in both areas. factors include:

- race/ethnicity
- poverty-causing issues
- Community
- breast-feeding practices
- access to health care

Racism and geographical segregation are only one cause. Health and social ills from economic change are just as significant including stress and physiological changes in pregnant mothers, and harmful behaviors. Race may mask these consequences of economic change. My findings revealed the necessity to address poor living circumstances, the need to empower women to become a part of their health decisions, to raise awareness within health care providers in the stress and inequality they may provoke, and to look at ways where families can be reunited, communities reconstructed.

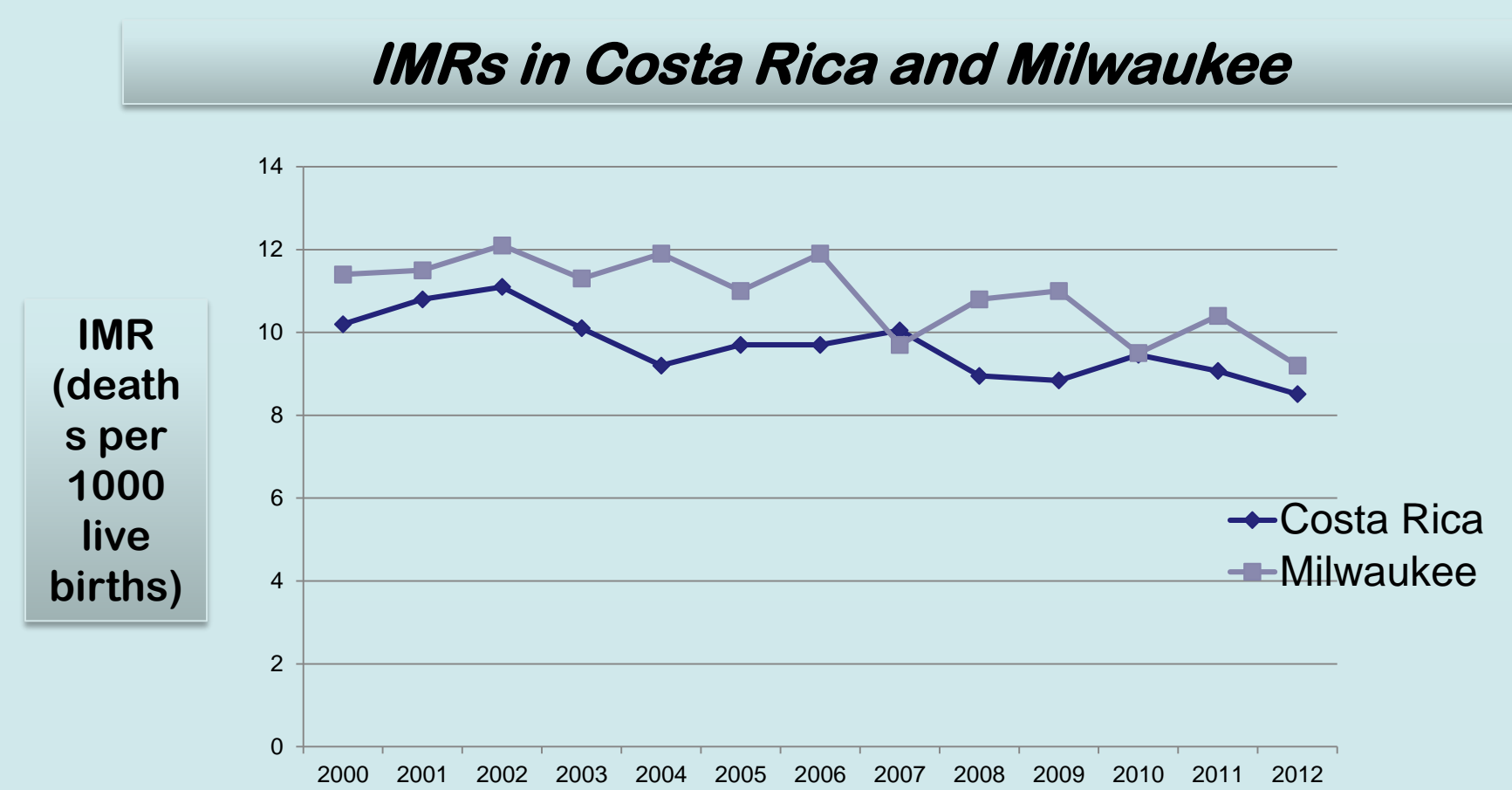


Figure A. Graph created by author. Information gathered from the City of Milwaukee Health Department and *Ministerio de Salud*

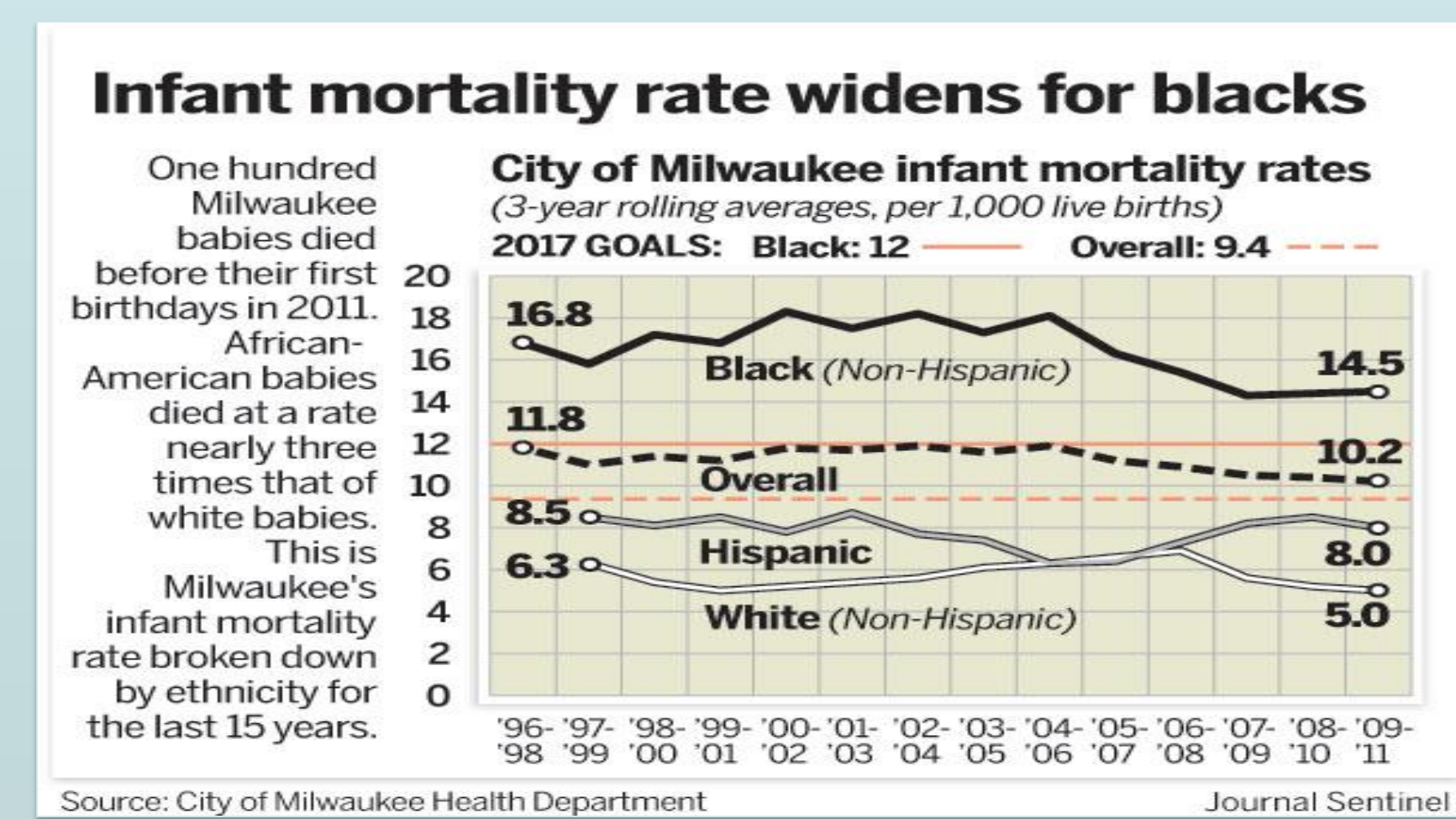


Figure B. *Milwaukee Journal Sentinel*. Shows a decline in Milwaukee's infant mortality rates overall as of 2012 however, there is a wider disparity between rates of African Americans and Whites

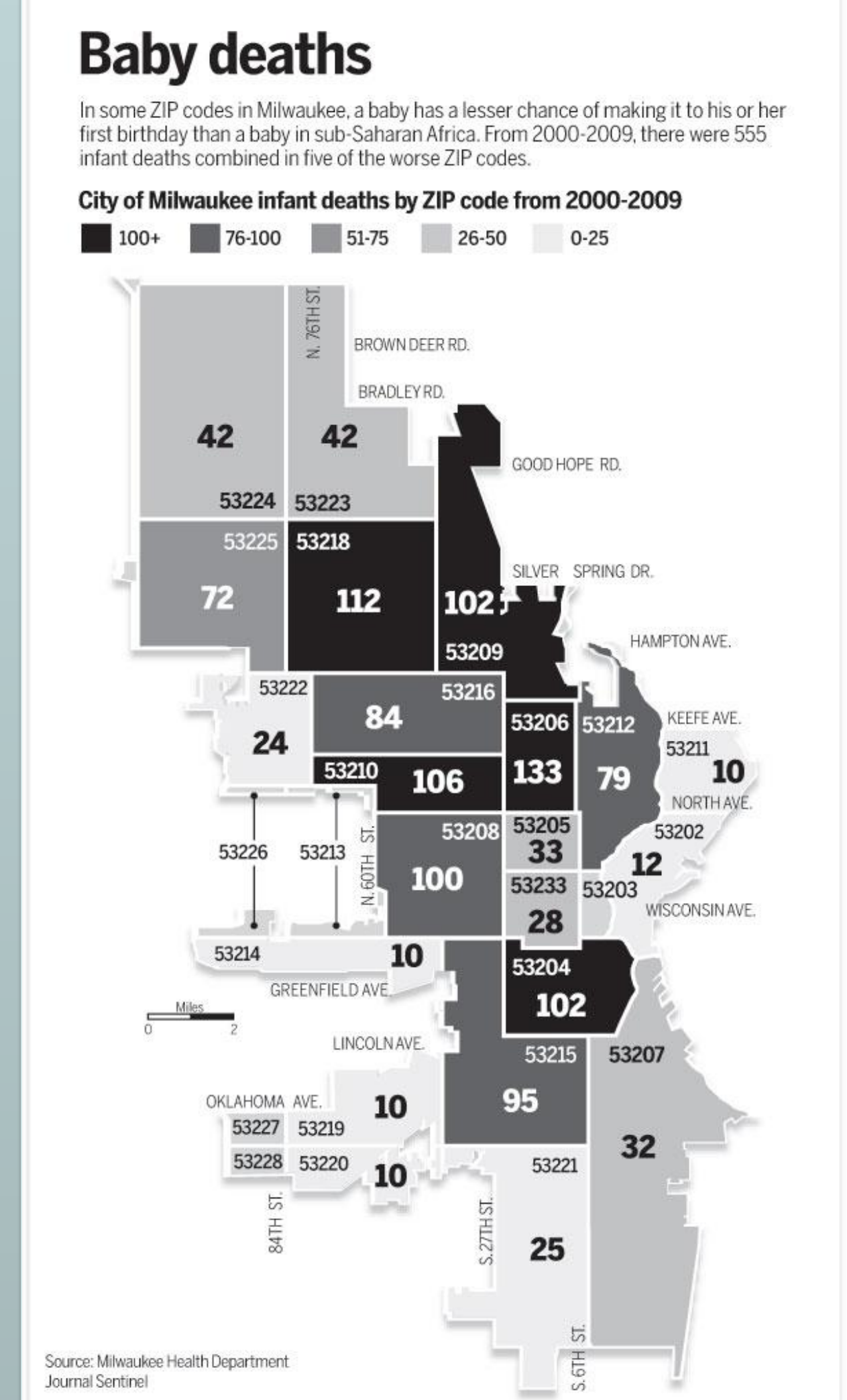


Figure C. *Milwaukee Journal Sentinel*. Shows the high-risk zip code areas in Milwaukee with the highest infant mortality rates. Most of these zip codes also have high rates in other factors such as incarceration and poverty rates. Area 53206 has the highest infant deaths with 133 deaths 2000-2009. Milwaukee's high risk zip code 53206 had a poverty rate of 39.17% and 95.10% for African Americans in that area.

Conclusions

~ We need more social sensitivity especially from politicians. Costa Rica concentrated on societal aspects when addressing its high infant mortality rates and accomplished a declining rate over the years. In reality, there is a need to address healthier communities for example, promoting proper health care early on in lives. Mothers need to be educated, African-American men at risk for incarceration needs to be considered to reunite families, and jobs need to be reconstructed. These social factors are crucial and possible as proved by Costa Rica, a developing country with less social and economic capital.

~ There is evidently a need to recognize deep factors that apply to the entire affected community. Costa Rica's causes of infant mortality today include congenital malformations of the circulatory and nervous system and respiratory issues during the perinatal period. They are addressed with working health policies such as universal health care, social stability through community efforts such as those by the Health Ministry, and a homogenous population; all elements Milwaukee cannot identify with. Milwaukee's infant mortality rates causes are mainly caused by societal factors that trigger stress. For my first hypothesis, I presumed that ignoring race would be inevitable and I was right. Looking at Milwaukee's racism and discrimination as a contributing factor towards infant mortality makes the homogenous population in Costa Rica a highlight. My second hypothesis of infant mortality in Milwaukee with preventable causes to blame was correctly proven considering the social factors contributing to the three main causes, especially premature births triggered by stress Current efforts are good foundations to speculate the personal struggles Milwaukee women, especially of African American backgrounds, are undergoing all because of today's cumbersome society. Such efforts will ignite a drive towards social stability demonstrated by Costa Rica.

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