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A Comparison of the United States and Costa Rican Health Care Systems and Their Influence on Immigrant Women's Maternal and Child Health Outcomes

Ву

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Submitted in Partial Fulfillment of the Requirements for Graduation with Honors from the South Carolina Honors College

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I. Thesis Summary

The United States and Costa Rica follow two different welfare state models that have impacted the development of their distinct health care systems. Costa Rica has a universal health care system, while the United States' system is mostly privatized, with some public health insurance options provided by the government. Health care is structured as a three-tiered system in Costa Rica that increases in specialization with subsequent levels. In the United States, health insurance is vital to health care access, with most people obtaining it through their employer. Although they approach health care in very different ways, both countries are similar in their approach to the health care needs of immigrants. Pregnant immigrant women hold a unique position in that they have access to certain levels of care that other immigrant groups cannot access due to the value each society places on maternal and child health. Access to care for pregnant women is important to ensure that they receive the information pertinent to their health, and that of their babies. Nicaraguan- and Mexican-origin people form the largest immigrant populations in Costa Rica and the United States, respectively. In general, immigrant women are the subject of unfavorable societal perceptions that can negatively affect their health. In spite of their socioeconomic disadvantage, immigrant women have better perinatal outcomes than native women in some health areas. However, this phenomenon is not seen with every immigrant group. Additionally, certain health outcomes can be worse for immigrants in comparison to their native-born counterparts. The structures and policies that form health care systems are key components in determining the access to health for immigrant groups. Looking at sociocultural factors is also important because they can greatly affect how immigrants approach the maintenance of their own health in a new environment.

II. Abstract

Health is a fundamental right for all humans, and every nation has a unique system for health care delivery. While the United States and Costa Rica follow two different welfare state models, there is still value in comparing the two countries. This project was inspired by my public health-based study abroad experience in Costa Rica in May 2018, which sparked a desire to learn more about the structures that form the health care system of each country. The United States has a more privatized and fragmented health care system, while Costa Rica has a public, universal health care system. Although different in many ways, the United States and Costa Rica have similar approaches when concerning the health of immigrants. In this project, I break down the structures that form each health care system, and delve into how having an immigrant status affects the maternal and child health outcomes of immigrant women. In both countries immigrant women find ways to access health care for their babies and themselves but are in general viewed by society as burdens on the health care system.

III. Inspiration for Thesis Topic

Alongside 21 other students and 4 USC faculty members, I participated in the 2018 Global USC in Costa Rica: Global Health program, a month-long summer study abroad program based in San José, Costa Rica. The program offered several Spanish and public health courses that focused on topics such as epidemiology, global health, and Spanish for health professionals. During our trip we visited local health care organizations where we listened to lectures, toured facilities, and learned about Costa Rica's health care system from health care professionals.

On May 16th, we visited Hospital Clínica Bíblica, receiving a tour of this large private hospital and learning more about private health care delivery in Costa Rica. In addition to the tour, we also received a lecture from one of the physicians, Dr. Rodolfo Garbanzo, who introduced us to the Costa Rican health care system. On May 21st and 22nd, we visited a high school and elementary school in Guanacaste, another province in Costa Rica. On both days, we partnered with the Caja Costarricense de Seguro Social (CCSS) and witnessed how this national organization carried out community health promotion activities, which in this instance focused on proper water consumption and kidney health. On May 24th, we received a lecture from Dr. Avendaño who again outlined how Costa Rica structures its health care system as well as taught us about the diseases unique to Costa Rica and other tropical climates. Later that day we visited a primary health care facility known as an EBAIS and saw how the facility functioned by speaking directly to professionals about their roles in health care delivery. Finally, we visited a larger clinic called Clínica Tibás on May 29th, receiving a lecture from its staff.

For the majority of my project, I used information from relevant published articles to delve deeper into the what I learned in Costa Rica and in my Maternal and Child Health (MCH) class. During the Fall of 2018 I was a student in Dr. Mann's Maternal and Child Health class

health disparities, prenatal care, childbirth, and breastfeeding through the lens of different conceptual frameworks. Through the examination of a range of scholarship, I wanted to figure out what had been previously investigated and was already known by researchers on the topics of health care systems and immigrant MCH. Research publications, government websites, the OECD (Organization for Economic Cooperation and Development), and other federal reports were instrumental for my analysis of both countries because they provided data on health care delivery and maternal health outcomes. The combination of my experience studying abroad with the knowledge I gained through Dr. Mann's class created a desire to learn more about both subject areas, culminating in this specific thesis project.

IV. Introduction

Every country has its own history, challenges, and objectives that have collectively contributed to its current state of health care delivery. The World Health Organization emphasizes that every person has the fundamental right to the highest attainable standard of health, but every country has its own vision for health care delivery, creating vastly different systems across nations. Two particular systems of interest are those of the United States and Costa Rica, and using a cross-national comparative perspective can be illuminating on both systems. Although each is unique, there are key components in both that can be attributed to one of the three main models known as "welfare states." The welfare state is the collection of policies that a nation forms to secure a minimum of welfare to its citizens, with there being constant debate on how welfare states should be designed to best help reduce inequality and poverty (Korpi & Palme, 1998). For example, some models emphasize targeting aid toward poorer populations, while others believe in a more universal approach for welfare distribution. The United States and Costa Rica follow two different welfare state models, and from this their two varying health care delivery systems have grown.

The 3 main welfare state models are the liberal, corporatist-statist, and social-democratic models (Esping-Andersen, 1990). Costa Rica follows the social-democratic model, while the United States follows the liberal model. The social-democratic model usually results in universal health care systems as it focuses on pursuing equality of the highest standard for all citizens (Esping-Andersen, 1990). Esping-Andersen also notes that the United States and other liberal regimes respond to social inequalities, rather than proactively work to prevent them. There is limited assistance to marginal groups because citizens are expected to rely on the market, rather than the state, to guarantee their welfare (Orloff, 1993). This includes accessing health insurance

coverage to subsidize the out-of-pocket costs of health care within a privatized model of health care delivery. This is all to say that the welfare state model each country follows is an important distinction because it effects their approach to health and its delivery.

Usually nations with similar welfare states, populations and demographics are compared, but I did not choose to compare two countries similar in these ways. The U.S. and Costa Rica are the two countries with which I have the most health care knowledge and experience. Although they have opposite approaches to health care delivery, the way that immigrants are perceived and treated is arguably similar in both nations. Immigrants are commonly viewed as burdens on the health system, taking away resources from birthright citizens. While it is impossible to attribute a direct causation between the systems of health care delivery to the maternal and child health outcomes, examining the structures and practices of each country can be enlightening on the aid and struggles that immigrant women encounter in achieving health for themselves and their kids.

Maternal and child health outcomes vary across different immigrant populations due to their diverse compositions, the unequal spread of resources, and prejudice. There are now close to 12 million undocumented immigrants in the U.S., and 9% of Costa Rica's population is formed by immigrants (DESA and UNICEF, 2014). Ignoring their health alienates a large portion of residents who need their health issues addressed. The negative societal attitudes that immigrants face when they leave their homes in pursuit of better opportunities, particularly immigrant women, often affects their health decisions. There are laws in place that protect immigrant health, but they are not always properly enforced, nor cover preventative health measures, which is detrimental to the health of this group.

V. Structure of the Costa Rican Health Care System

Costa Rica has a universal health care system based strongly in primary care that covers the majority of its population and is generally viewed quite positively within and beyond its borders. In 2014, 95% of Costa Rica's population was covered by the national health insurance system, which is managed by the CCSS, also known as La Caja (OECD, 2017a). The CCSS is the institution for administering public health services in Costa Rica and is built upon these 5 principles: social involvement, universality, mandatory, equity, and solidarity (Garbanzo, personal communication, May 16, 2018). To execute these principles, La Caja is broken into three tiers, or levels of attention, that become more specialized with each succession. The first tier is the most general form of care and is comprised of the EBAIS (Equipos Básicos de Atención Integral en Salud), or the basic integral health care team, while the second tier consists of large clinics and regional hospitals. Finally, the third and highest tier consists of three national hospitals and five specialized hospitals that treat the most severe patient cases.

The EBAIS forms the base of Costa Rica's system of health care delivery. Individuals are assigned to an EBAIS based on where they live, with one location serving approximately 1,000 households in its neighboring area (Pesec et al., 2017). Each EBAIS consists of a doctor, nurse, health care assistant, pharmacy technician, medical records technician, and ATAPS (Asistente Técnicos de Atención Primaria), but the exact makeup of these teams varies depending on the location. Garbanzo explained that the ATAPS are important because they visit houses in the community, assessing each area for risk, and helping establish healthy practices at home, directly where citizens engage in most of their health behaviors (personal communication, May 16, 2018). Outpatient services, family planning, vaccinations, and a multitude of other services are all delivered through the EBIAS to the community at large.

The second tier provides outpatient and inpatient care through ten major clinics, thirteen peripheral hospitals, and seven regional hospitals (Lee & McKee, 2015). Patients who need more specialized care cannot directly access the second tier; they must be referred from their EBAIS, which is networked with a defined secondary care facility. The tertiary, and highest, level of the health care system provides the most complex treatments and procedures through the national general hospitals and specialized hospitals. The three national hospitals are Hospital San Juan de Dios, Hospital México, and Hospital Rafael Ángel Calderón Guardia (María del Rocío Sáenz, Acosta, Muiser, & Bermúdez, 2011). The five specialized hospitals concentrate on pediatrics, gerontology, women's health, rehabilitation, and psychiatry (Lee & McKee, 2015). The three national hospitals are all located in the province of San José where the population density of Costa Rica is the greatest.

Although there are private options, public health services are predominant in Costa Rica, with the CCSS being the main service provider for personal health care services. One downfall to universal access is that wait times can be a year or more for certain medical procedures, forcing individuals to pay out-of-pocket in the private sector to receive treatments more quickly. Out-of-pocket spending has increased recently in Costa Rica from 2000-2015, growing from \$80 to \$200, with the majority of this spending going toward medical consultations and medications (WHO, 2019a). Because of increased wait times, the private sector has grown in recent years, and now features its own network of clinics, hospitals, insurance companies, pharmacies, etc. From this increase in private services, a system of social stratification has formed as those of a lower socioeconomic status, who cannot afford to pay high out-of-pocket costs, must wait for the proper care. Citizens that are more affluent can afford the cost of services in the private sector, accessing care more quickly than their poorer counterparts.

Lengthy waiting times for procedures are an issue in universal coverage, with clinicians having additional fee-for-service elements that can be utilized to reduce waiting times. In 2014, the average wait for a general surgery was more than 540 days, with joint replacement averaging the longest waiting period at 978 days (OECD, 2017a). While these conditions may not be life-threatening, they do impact a person's quality of life and their ability to work. Many people are now going directly to hospital emergency departments for immediate care, with 60% of Costa Rican and 12% of American emergency room visits being non-urgent in 2010 (OECD, 2017a). There was a national initiative in 2014 which was able to reduce waiting times by over a year with measures such as specifying maximum waiting times, extending operating hours, and adding personnel to monitor the wait times (Vargas & Muiser, 2013). Although wait times may not be ideal, citizens pay into the system knowing they will receive the quality care they need, just potentially not when they want it.

Health services in the CCSS are covered by contributions from the worker, employer, and the State, with fees dependent upon a worker's income, which must be above a certain threshold for contribution to the system. Costa Rica operates under a single-payer national health service, meaning that a single public agency is in charge of financing health care for all residents, with national health expenditures totaling 9.3% of its gross domestic product (GDP) (OECD, 2017a). Less than 1% of the population reported failing to seek care due to financial reasons compared to 22% of the U.S. population (OECD, 2017b). The poorest 20% receives almost 30% of the public spending on health care (Clark, 2002). This distribution gives especially poorer populations access to much needed health care that otherwise would be unaffordable and inaccessible.

To pay for this universal health care system, salaried workers and their families provide 60%, self-employed workers and their families contribute 25%, and 15% comes from pensioners

and their dependents. Within the salaried workers, the employee contributes 5.5% of income, the employer 9.25%, and the state 0.25%. Self-employed workers must be earning above minimum wage to contribute, which usually equates to anywhere from 3.45% to 10.69% of their income. Finally, pensioners contribute 5% of their pension to the maintenance of the health care system (María del Rocío Sáenz et al., 2011). The foundation of universality is strong in Costa Rica as everyone collectively contributes to and benefits from the health system which has allowed it to grow throughout the years.

Before 2008, the only health insurance provider in Costa Rica was the INS (Instituto Nacional de Seguros), but afterwards the health insurance market was created to provide private health insurance options. Approximately 5% of Costa Rica's population is not covered by the national insurance system, which includes informal or temporary workers, refugees, undocumented migrants, some indigenous groups without CCSS registration, and poorer individuals who should be covered, but are not aware of their rights (OECD, 2016). All inhabitants of Costa Rica, even if uninsured, have access to CCSS health services in emergencies and receive care at no cost. Any child care and prenatal care immigrant women receive is at no charge, as well as additional care such as hospitalization and surgery (OECD and ILO, 2018). Uninsured populations are able to obtain care at an EBAIS but are responsible for paying the full cost of service. To pay for services at the EBAIS, they will either be billed for their care, asked to pay in advance, or if eligible, enrolled in a CCSS insurance plan (Pesec et al., 2017). There are a number of ways for immigrants to obtain health care in Costa Rica, which makes it a favorable option for many families that must emigrate.

VI. Structure of the United States Health Care System

The United States health care system is unlike that of any other developed country with its fragmented conglomeration of public and private coverage options. Private options form the majority in the U.S., with 56% of Americans obtaining health insurance through their employer, or an employed family member (Berchick et al., 2018). U.S.-born workers have double the prevalence of insurance coverage in comparison to their Mexican and Central American-born counterparts, although they all work and live in the same country (Hammig, Henry, & Davis, 2019). Undocumented immigrants from Mexico and Central America constitute a significant portion of the U.S. workforce, yet still face disproportionate barriers in health care coverage and access. Due to its design, there are millions without health insurance coverage, with 8.8% of Americans (28.5 million people) living without health insurance in 2017 (Berchick et al., 2018). This figure includes both citizens and non-citizens, and clearly encompasses a large group of people.

The United States government provides insurance to certain qualified groups to supplement private options and to help reduce the coverage gaps seen among vulnerable populations, such as low-income individuals, children, and older adults. The Centers for Medicare and Medicaid Services (CMS) administers Medicare, a federal program that covers primarily those 65 and older. The CMS also partners with state governments to provide Medicaid, a health insurance program for low-income adults, and the State Children's Health Insurance Program (SCHIP), which covers children until they are 19 in qualified families (The Commonwealth Fund, 2019). In spite of numerous options in the U.S., there are still millions without health insurance, and thus without proper health care access. Health insurance coverage is expensive, and its high price tag is a burden for those with and without jobs in the U.S.

Even if an individual is insured, they still may not have access to quality care, due to being underinsured, or because their insurance company does not cover their procedure or medication. Insurance follows a cost sharing model where patients pay for the remaining cost not covered by insurance, in addition to monthly premiums, deductibles, copayments, and coinsurance, which is quite expensive when combined (Center on Budget and Policy Priorities, 2018). Low-income populations who do have health insurance cannot afford the abundance of additional fees, forcing them to forgo medical treatment. It is impossible to know exactly how much a treatment will cost before it is given because insurance companies negotiate with providers and hospitals to determine how much they will cover for a certain procedure. This creates wide variations in cost, services covered, and providers that can be seen. In forcing someone to choose between sustenance and health care, more likely than not, health care will come in second place. Nonetheless, having health insurance in America is necessary as a crucial step towards achieving health.

In 2014, health insurance marketplaces were established on the state and federal levels to increase access to private insurance coverage. Private health insurance can be purchased by individuals, but is usually funded by premiums, with the cost shared by employers and workers (The Commonwealth Fund, 2019). Quite often, private insurance companies use a narrow network of providers, meaning that if someone wants to see a provider outside that network, the cost will not be covered by insurance. While every plan has different coverage ranges, they all have a cap on the maximum out-of-pocket spending that a person pays per year. In 2019, this limit is set at \$7,900 for individual coverage, and \$15,800 for family coverage (Center on Budget and Policy Priorities, 2018). This upper limit is still financially harmful for low to middle-class families who most likely cannot cover an unexpected treatment, even with insurance coverage.

The United States' health care structure and policies reflects its liberal welfare state model. The words "liberal" and "welfare" have certain connotations in the U.S. that could easily be confused with this welfare state model, but neither societal definition is accurate when speaking of welfare states. Liberal welfare states involve a mix of social assistance and social insurance programs. There are means-tested programs that serve as poverty-reduction efforts for only the most vulnerable populations, typically those living near the poverty line or with disabilities (Medicaid, 2019). The major programs are retirement insurance (i.e., Social Security), unemployment insurance, and health insurance (i.e., Medicare) for older individuals. The liberal welfare state is described as encouraging the division between the minority reliant on government assistant, and the more prosperous majority that relies on the market for their welfare needs (Orloff, 1993). Class differences develop that maintain the gaps between economically marginalized and more affluent populations. These differences between socioeconomic groups are clearly evident in the U.S. and have a major impact on how health care delivery is perceived and provided to different populations.

The two largest governmental interventions in facilitated health care access in the United States are Medicare and Medicaid. The 2019 poverty guidelines outline that a family of 4 whose annual income is below the poverty line of \$25,750 is eligible for Medicaid, but not all who fall below this threshold are guaranteed Medicaid coverage (U.S. Department of Health & Human Services, 2019). Medicaid is paid for through a combination of federal and state funds generated through tax revenue. The federal government provides the general guidelines for how a state should administer its Medicaid program, then each state government creates its own plan for how the funds are allocated, determining individuals to be covered, provided services, and provider reimbursement (Centers for Medicare & Medicaid Services, 2019). In 2017, Medicaid covered

19.3% of the U.S. population (Berchick et al., 2018). Because Medicaid is means-tested and directed how each state sees fit, some areas have more resources than others to provide for its community than others.

The majority of hospitals in the U.S. accept Medicaid funds, and must treat any patient who presents with a medical emergency. From this stipulation, some undocumented immigrants have been able to qualify for Emergency Medicaid, which covers emergency services for low-income patients without regard to legal status. Immigrant women most often use Medicaid during labor and delivery as this insurance completely covers its associated costs. A JAMA study reported that 82% of spending and 91% of hospitalizations covered under Emergency Medicaid were for childbirth and pregnancy-related complications in 2004 (DuBard & Massing, 2007). Prenatal and postpartum care are unfortunately not covered by this federal policy, and it is up to state legislatures to decide if they will provide it. Undocumented immigrant women are the least likely group to obtain adequate prenatal care when compared to U.S.-born women (Korinek & Smith, 2011). In addition to their exclusion from public health insurance and often limited resources, undocumented women choose not to seek health care when needed due to a number of factors such as fear of deportation, judgment, and language barriers.

Immigrant health is a product of policies of entitlement and exclusion, and policy does not place them at the top of the list to receive the best care possible (Dos Santos, 2015). Legal permanent residents are not eligible for public coverage until 5 years of residence in the U.S. (The Commonwealth Fund, 2019). While insurance may be offered through their jobs, this is not often the case as many immigrants tend to work in low-wage and temporary jobs (Hammig et al., 2019). About 44% of recent immigrants and 63% of established immigrants were found to be fully insured in a 2003 study (Ku, 2009). U.S.-born children with non-citizen or naturalized

parents have lower rates of public and private health insurance than children with U.S.-born parents (Derose, Escarce, & Lurie, 2007). Citizenship status and length of stay tend to be the most important factors for insurance coverage for immigrants in the United States.

The complex interconnections of the United States health care system form the most expensive health care system in the world, for both the government and individual citizens. According to the CMS, spending on health care services in the U.S. totaled \$3.5 trillion in 2017, which accounts for 17.9% of GDP. The federal government covered 28.1% of total health spending, with households also providing a significant portion at 28.0%. Private businesses accounted for 19.9% of total health care spending, with state and local governments accounting for 17.1% and finally, other private revenues provided 6.8%. Of the two largest federally funded programs, Medicaid is tax-funded, with the federal government matching a certain percentage of the funds that states provide, normally ranging from 50-74% of a state's Medicaid expenditures (The Commonwealth Fund, 2019). In 2017, health spending averaged \$9892 per person in the U.S., with the average for all 35 OECD countries as \$4,003 (OECD, 2017b). Health care costs are higher per capita in the United States than in any other country. Health care professionals have significantly higher incomes than their peers abroad, which increases the price of services. The U.S. is also at the forefront of medical research, and many resources are used to bring a new device or medication from conception to the market. The high cost of U.S. health care should be reciprocated with the highest standards and access to care.

VII. Maternal Health Outcomes for Immigrant Women in Each Country

In comparing the health care systems of Costa Rica and the United States, it is important to not only focus on their respective structures, but also the effects each may have on the people they serve. One group that is often overlooked within the coverage gaps of these systems is the immigrant population. Even if they are naturalized citizens or are the U.S.-born children of immigrants, some native-born citizens do not think of them as true citizens, which affects their health care access. There are currently an estimated 45 million immigrants living in the U.S. (Department of Homeland Security, 2018), and Costa Rica is estimated to have over 400,000 total immigrants, representing 8.5% of its population (DESA and UNICEF, 2014). Both immigrant populations form an integral part of their new communities and bring many invaluable resources to their new country through cultural exchange and the varied occupations they hold.

Costa Rica has the highest percentage of immigrants in Latin America, with Nicaraguans accounting for 75% of its foreign-born population, of which the majority are women (Maria del Roció Sáenz, Lamy, & Castañeda, 2003). The majority of immigrants in the U.S. are Latinx, with many of Mexican origin, and this influx of new people continuously changes the birth demographics in both countries (Maria del Roció Sáenz et al., 2003). The United States and Costa Rica both have birthright citizenship, so immigrant children are rightful citizens by law, but are often rejected as true citizens because of societal discrimination surrounding the immigrant status of their parents (Korinek & Smith, 2011). Having an undocumented status also limits access to insurance and public health assistance programs, forcing many to limit contact with formal agencies to preserve their residence in the new country, although their children have the same rights as any other citizen. In addition to these fears, many immigrants have to deal

with discrimination and racism in some form in their new homes. Throughout the world it is common for whiteness to be associated with superiority or positive qualities. Race is easy to conceptualize and can signal the different levels in society. Nicaraguans are labeled as dark and violent others by some native-born Costa Ricans, who are mostly of a lighter skin tone (Campo-Engelstein & Meagher, 2011), and the social construction of race and nativity in the U.S. places Latinx people near the bottom of the U.S. racial hierarchy (Holmes, 2006). In Costa Rica, attitudes toward Nicaraguan immigrants were found to be more negative than positive, which can have a lasting effect on their sense of integration (Rosero Bixby, 2004). These negative perceptions of minority groups play a role in their decreased access and underutilization of health resources. Latinx immigrant women have rights that protect their health during pregnancy, but negative attitudes can deter them from receiving care when needed.

Maternal and child health is a priority throughout the world, and prenatal care is a crucial component of MCH because it can lower the risks of morbidity and mortality. While prenatal care cannot ensure that pregnancy outcomes will be favorable, it has been shown to help catch diagnoses earlier (Mann, 2018). Not all women engage in prenatal care or have regular consultations with a doctor during their pregnancy, with immigrant women displaying particularly low levels of prenatal care utilization (Korinek & Smith, 2011). They often have later consultations that are less frequent and more discontinuous when compared to their native-born counterparts. This low utilization is harmful because prenatal care reduces long-term health care costs associated with labor and delivery complications (Korinek & Smith, 2011). The likelihood of having only a few prenatal visits during pregnancy was 2.5 times higher among immigrants than native-born American women (Guendelman et al., 1999). A study in Costa Rica found that only 59% Nicaraguans had adequate prenatal care, versus 83% of Costa Ricans (Mok

et al., 2001). The importance of prenatal care extends beyond perinatal outcomes; it is the first experience that some may have with the health care system and this experience can determine how involved they are in maintaining their future health. The women are often blamed for not engaging in prenatal care but are not given the proper resources to access it.

In both the U.S. and Costa Rica, the fetus is generally viewed more favorably than the mother. Some health care providers even believe that pregnant immigrant mothers are undeserving of health care, viewing them as irresponsible, immoral, and illegal (Dos Santos, 2015). They often have to strongly advocate for themselves to be believed and properly helped by physicians, even in emergency rooms where everyone legally has health care access. Immigrants face barriers due to poverty, foreign-language skills, job hazards, citizenship status, and cultural differences, but these obstacles are not their only worries. Deportation is a constant threat for undocumented immigrants, pushing them to fear attaining citizenship and proper health care services. Generally, society has some level of compassion for pregnant migrant women, which can help them access a higher level of care than other immigrant subgroups due to there being two lives at risk, one of which (at least) will be a citizen of that country.

Costa Rica prides itself on the universality of its health care system, and undocumented women seeking maternal care pose a key challenge to its system, as they have access to preventative, gynecological, and emergency services. Migrant children, pregnant women, and babies aged up to 4 months have access to general medical care, regardless of their status (OECD, 2017c). There is growing public concern on the burden that immigrants are creating on Costa Rica's health system, as many fear its current financing is unsustainable, especially with the addition of more people who may not be properly contributing to the system (Dos Santos, 2015). This fear is also present in the United States, resulting in restricted assistance to

immigrants due to inequitable structures and a hostile social environment. The negative perceptions of immigrants are largely disproven, as they use health services less often than native citizens in both countries. 83% of Costa Ricans consulted with a doctor in the last year, compared to only 66% of Nicaraguans (Maria del Roció Sáenz et al., 2003). The per capita expenditure of health services on immigrants is lower than that of Costa Ricans (Herring & Bonilla, 2009). The lower rates of health insurance coverage and higher unemployment and poverty rates seen among immigrant populations lowers their rate of health care utilization.

Paradoxically, studies have shown that immigrants initially have better perinatal outcomes when compared to their U.S.-born counterparts, but the longer they stay in the U.S., the worse their health outcomes become, with a general decline in health and mortality advantage over time (Singh, Rodriguez-Lainz, & Kogan, 2013). U.S.-born Mexican-American women are at a higher risk of delivering a low-birth weight (LBW) or preterm infant in comparison to their Mexico-born counterparts (Harley & Eskenazi, 2006). Preterm birth is associated with a higher risk of perinatal death, neurological impairment, and disability (Tucker & McGuire, 2004). Immigrants were found to have lower LBW odds and an 11% lower risk for preterm births in the U.S. (Guendelman et al., 1999). Foreign-born Mexicans had lower instance of complications like hypertension, pre-eclampsia, and anemia compared to their U.S.-born counterparts (Flores, Simonsen, Manuck, Dyer, & Turok, 2012). These complications are dangerous and can lead to unfavorable outcomes, such as preterm birth. The rate of premature births is not significantly different for Nicaraguans at 7% compared to Costa Ricans at 8% (Mok et al., 2001). Nicaraguan immigrants in Costa Rica show some immunity from low SES, as they have similar or sometimes better health outcomes than the native population.

One reason for these better MCH outcomes for immigrants could be the more favorable attitudes in their culture towards childbearing, and a greater family support system. Those with the highest level of social support had reduced rates of pregnancy complications and increased birth weight, likely due to their better diets and increased prenatal vitamin usage. Those with the highest level of social support during pregnancy came to the U.S. in the range of 0-10 years old, and those with the lowest support levels emigrated at an older age (Harley & Eskenazi, 2006). It is known that breastfeeding has many health benefits for the mother and baby, and the prevalence of breastfeeding for immigrant mothers was 87.42% in 2011, compared to 77.09% for U.S. born mothers (Singh et al., 2013). This can be in part attributed to positive cultural beliefs around breastfeeding. Other suggestions for the better health among immigrants include the lower prevalence of risk behaviors like drinking, smoking, and unhealthy diet (Singh et al., 2013). Protective cultural factors like low rates of substance use in pregnancy, strong familial support, and positive attitudes towards maternity help mothers make positive decisions regarding their health.

Some studies find the contrary, that immigrant outcomes are worse than those of nativeborn women. Nicaraguan women had a higher average number of children, at 3.8 births, compared to 2.6 average births for Costa Ricans (Rosero-Bixby, Brenes, Mario, & Mok, 2002). Having more children while living in poverty with restricted health care access is not ideal for the greatest achievable level of health. The area where Nicaraguans fared worse than Costa Ricans was in having low birth weight babies. 8% of Nicaraguans had LBW babies, versus 5% of Costa Ricans (UNFPA, 2016). The maternal mortality ratio for Costa Ricans is 27.9 in 2016 compared to 36.4 per 100,000 women for Nicaraguans (INEC, 2017). One study in Costa Rican found that places with high immigration rates had a lowered level of health and higher infant and

maternal mortality rates (Maria del Roció Sáenz et al., 2003). Surprisingly, 62.0% of Nicaraguan female immigrants are insured, but this population still has the tendency to use less health services overall (Maria del Roció Sáenz et al., 2003). There is a tendency of Nicaraguan mothers to first seek attention for their children rather than themselves, which then leads to more health problems for them, compounded by a lack of preventative care. Most Nicaraguan women demand health services at childbirth, not prenatal or postnatal care. Leaving health care access until it warrants emergency services is dangerous, but so many are forced into this position.

VIII. Conclusions and Future Improvements

My experiences in both the Global USC program and the Maternal and Child Health class were transformative, and crucial in the production of this thesis project. Through those experiences and my research, I have learned that the United States and Costa Rica have dissimilar health care systems, but an equally important role in overall health care delivery. With the United States' largely privatized system, and Costa Rica emphasizing public coverage, there are different areas in which each system can improve. What links these two distinct countries are their approaches to immigrant health. Immigrants form a large portion of the populations in both countries, yet they have unequal health care access from barriers that prevent them from always seeking appropriate care.

While the health care structures are important to note in explaining the disparities in immigrant health, sociocultural factors are also important contributors to health outcomes. The way they are perceived and treated affects their health decisions (Berk, Schur, Chavez, & Frankel, 2000). Those who have negative health experiences from biased physicians may not be as eager to seek care in the future. Even without a direct negative experience, news articles and societal attitudes affect the way that people view themselves, which then can affect their health decisions. Those who feel sentiments about being undeserving of care may unfortunately begin to believe it and not seek assistance when needed. There are still many barriers and ideals to overcome within the medical community and society as a whole, to eventually treat all immigrants with respect, and to make them feel like they belong, and that their health matters.

Every health care system can progress by studying others and implementing small changes that improve health care access. Ongoing federal and state policy decisions have profound implications for the health care of undocumented immigrants living in the U.S. and

Costa Rica. Costa Rica's largely public health care system covers a large portion of the population, but because of that, there are long wait times for certain procedures, which then allows those with the greatest wealth and influence to obtain private services, leaving others to wait. Preventative care is not as accessible in the U.S. as it is in a universal health system, leading people to postpone receiving care until their disease has progressed. This prolongment is dangerous because some diseases may be untreatable at later stages, but could have been easily treated initially. As conditions become increasingly serious, the cost associated with treatment also increases, further restricting those who are unable to pay. Expanding health insurance options for undocumented immigrants to purchase could have a large effect on their health. Many of them have jobs but are ineligible for Medicaid if they have not resided in the US for at least five years (The Commonwealth Fund, 2019). This leaves them vulnerable for a large period of time and can lead mild health issues to become more serious.

Both the United States and Costa Rica could improve their data on immigrant health care quality and access. The United States does not routinely report and analyze health statistics by immigrant status (Singh et al., 2013). Monitoring the health and well-being of immigrants is important as they integrate into their new societies and contribute to their communities. Costa Rica and the U.S. need better records systems for immigrants with accurate information regarding their duration, citizenship status, and English language proficiency, as all of these factors can affect their health and its determinants. There are limited records on migrants in Costa Rica, as most institutions do not keep records by nationality, even in the health sector (Maria del Roció Sáenz et al., 2003).

Health outcomes research should expand to include undocumented immigrants to better understand their health statuses. From valid research comes evidence for policy changes that can

positively affect marginalized groups. It is important to accurately collect their demographics, identify their health problems, and understand their access to health care in order to change it. There are challenges in identifying and sampling immigrant populations as their fear of deportation often outweighs their willingness to participate. Many studies are based on localized samples or data sets which limits their generalizability to the entire population of the U.S. or Costa Rica. The scarcity of data on undocumented immigrants limits our understanding of their health status and behavior. It is hard to determine the relationship between immigration and health, their main needs and demand for health services without the proper research.

Eradicating systemic racism and bias in the U.S. seems impossible but is the greatest way to end health disparities based on factors such as race, ethnicity, and socioeconomic status. The three large immigrant legal status groups are naturalized citizen, legal permanent residents, and undocumented immigrants (López, Bialik, & Radford, 2018). There are more delays and restrictions now than in the past on their ability to adjust their status. Ending the stigma that immigrants use resources that other citizens could be using is an important step towards equality. Contrary to popular belief, insured immigrants have much lower medical expenses than US-born citizens (Ku, 2009). Some Americans believe that immigrants are burdens on the nation because they take jobs and housing from U.S.-born citizens while also straining the health care system by taking a large portion of health care expenditure. The average medical costs of immigrants was found to be 14-20% less than that of U.S.-born citizens (Ku, 2009). Dealing with societal bias would also benefit the health of immigrant women in Costa Rica. There would be less stigma and restrictions surrounding their health care, allowing them to have greater health care access, which hopefully improves outcomes.

IX. References

- Berchick, E., Hood, E., & Barnett, J. (2018). *Health Insurance Coverage in the United States:*2017 (No. P60-264; p. 23). Retrieved from United States Census Bureau website:

 https://www.census.gov/library/publications/2018/demo/p60-264.html
- Berk, M. L., Schur, C. L., Chavez, L. R., & Frankel, M. (2000). Health Care Use Among Undocumented Latino Immigrants. *Health Affairs*, *19*(4), 51–64. https://doi.org/10.1377/hlthaff.19.4.51
- Campo-Engelstein, L., & Meagher, K. (2011). Costa Rica's "White legend": how racial narratives undermine its health care system. *Developing World Bioethics*, 11(2), 99–107. https://doi.org/10.1111/j.1471-8847.2011.00301.x
- Center on Budget and Policy Priorities. (2018, September). Key Facts: Cost-Sharing Charges.

 Retrieved March 17, 2019, from Beyond the Basics website:

 http://www.healthreformbeyondthebasics.org/cost-sharing-charges-in-marketplace-health-insurance-plans-answers-to-frequently-asked-questions/
- Centers for Medicare & Medicaid Services. (2019). Medicaid State Plan Amendments. Retrieved March 18, 2019, from https://www.medicaid.gov/index.html
- Clark, M. A. (2002). HEALTH SECTOR REFORM IN COSTA RICA: REINFORCING A PUBLIC SYSTEM. 23.
- Department of Homeland Security. (2018). *Estimates of the Illegal Alien Population Residing in the United States: January 2015*. Retrieved from https://www.dhs.gov/immigration-statistics/population-estimates/unauthorized-resident

- Derose, K. P., Escarce, J. J., & Lurie, N. (2007). Immigrants And Health Care: Sources Of Vulnerability. *Health Affairs*, 26(5), 1258–1268. https://doi.org/10.1377/hlthaff.26.5.1258
- DESA and UNICEF. (2014). Migration Profiles: Common Set of Indicators. Retrieved April 4, 2019, from https://esa.un.org/miggmgprofiles/indicators/indicators.htm
- Dos Santos, S. L. S. (2015). Undeserving mothers? Shifting rationalities in the maternal healthcare of undocumented Nicaraguan migrants in Costa Rica. *Anthropology & Medicine*, 22(2), 191–201. https://doi.org/10.1080/13648470.2015.1004503
- DuBard, C. A., & Massing, M. W. (2007). Trends in emergency Medicaid expenditures for recent and undocumented immigrants. *JAMA*, 297(10), 1085–1092. https://doi.org/10.1001/jama.297.10.1085
- Esping-Andersen, G. (1990). *The three worlds of welfare capitalism*. Cambridge, UK: Polity Press.
- Flores, M. E. S., Simonsen, S. E., Manuck, T. A., Dyer, J. M., & Turok, D. K. (2012). The "Latina Epidemiologic Paradox": Contrasting Patterns of Adverse Birth Outcomes in U.S.-Born and Foreign-Born Latinas. *Women's Health Issues*, 22(5), e501–e507. https://doi.org/10.1016/j.whi.2012.07.005
- Guendelman, S., Buekens, P., Blondel, B., Kaminski, M., Notzon, F. C., & Masuy-Stroobant, G. (1999). Birth Outcomes of Immigrant Women in the United States, France, and Belgium. *Maternal and Child Health Journal*, *3*(4), 177–187.

 https://doi.org/10.1023/A:1022328020935

- Hammig, B., Henry, J., & Davis, D. (2019). Disparities in Health Care Coverage Among U.S.
 Born and Mexican/Central American Born Labor Workers in the U.S. *Journal of Immigrant & Minority Health*, 21(1), 66–72. https://doi.org/10.1007/s10903-018-0697-6
- Harley, K., & Eskenazi, B. (2006). Time in the United States, social support and health behaviors during pregnancy among women of Mexican descent. *Social Science & Medicine*, 62(12), 3048–3061. https://doi.org/10.1016/j.socscimed.2005.11.036
- Herring, A., & Bonilla, R. (2009). Inmigrantes nicaragüenses en Costa Rica: Estado y utilización de servicios de salud. *Población y Salud en Mesoamérica*.https://doi.org/10.15517/psm.v7i1.1094
- Holmes, S. M. (2006). An Ethnographic Study of the Social Context of Migrant Health in the United States. *PLOS Medicine*, *3*(10), e448. https://doi.org/10.1371/journal.pmed.0030448
- Korinek, K., & Smith, K. R. (2011). Prenatal care among immigrant and racial-ethnic minority women in a new immigrant destination: Exploring the impact of immigrant legal status.

 Social Science & Medicine (1982), 72(10), 1695–1703.

 https://doi.org/10.1016/j.socscimed.2011.02.046
- Korpi, W., & Palme, J. (1998). The Paradox of Redistribution and Strategies of Equality:
 Welfare State Institutions, Inequality, and Poverty in the Western Countries. *American Sociological Review*, 63(5), 661–687. https://doi.org/10.2307/2657333
- Ku, L. (2009). Health Insurance Coverage and Medical Expenditures of Immigrants and Native-Born Citizens in the United States. *American Journal of Public Health*, 99(7), 1322–1328. https://doi.org/10.2105/AJPH.2008.144733

- Lee, T., & McKee, D. (2015). An Empirical Evaluation of Devolving Administrative Control to Costa Rican Hospital and Clinic Directors. *International Journal of Health Services*, 45(2), 378–397. https://doi.org/10.1177/0020731414568515
- López, G., Bialik, K., & Radford, J. (2018). Key findings about U.S. immigrants. Retrieved April 8, 2019, from Pew Research Center website: https://www.pewresearch.org/fact-tank/2018/11/30/key-findings-about-u-s-immigrants/
- Mok, M. C., Bixby, L. R., Camacho, G. B., Solís, M. L., Lutz, M. I. G., & Pissa, J. C. V. (2001).
 Salud reproductiva y migración nicaragüense en Costa Rica 1999-2000: Resultados de una Encuesta Nacional de Salud Reproductiva. *Programa Centroamericano de Población* (*PCP*), 189.
- OECD. (2017b). *Health at a Glance 2017: OECD Indicators*. Retrieved from http://www.oecd.org/unitedstates/Health-at-a-Glance-2017-Key-Findings-UNITED-STATES.pdf
- OECD. (2017a). *OECD Reviews of Health Systems: Costa Rica 2017*. Retrieved from https://www.oecd-ilibrary.org/social-issues-migration-health/oecd-reviews-of-health-systems-costa-rica-2017_9789264281653-en
- OECD. (2017c). OECD Reviews of Labour Market and Social Policies: Costa Rica. OECD Publishing.
- OECD. (2016). *Health Systems Characteristics Survey 2016*. Retrieved from http://www.oecd.org/els/health-systems/OECD-HSC-Survey-2016-CostaRica-Comments.pdf

- OECD and ILO. (2018). *How Immigrants Contribute to Costa Rica's Economy*. Retrieved from https://read.oecd-ilibrary.org/development/how-immigrants-contribute-to-costa-rica-s-economy_9789264303850-en#page2
- Orloff, A. S. (1993). Gender and the Social Rights of Citizenship: The Comparative Analysis of Gender Relations and Welfare States. *American Sociological Review*, *58*(3), 303–328. https://doi.org/10.2307/2095903
- Pesec, M., Ratcliffe, H. L., Karlage, A., Hirschhorn, L. R., Gawande, A., & Bitton, A. (2017).

 Primary Health Care That Works: The Costa Rican Experience. *Health Affairs (Project Hope)*, *36*(3), 531–538. https://doi.org/10.1377/hlthaff.2016.1319
- Rosero Bixby, L. (2004). Retos de la inmigración nicaragüense a Costa Rica. *Actualidad Económica*, *núm. 307*, *pp 75-79*. Retrieved from http://www.kerwa.ucr.ac.cr/handle/10669/75372
- Rosero-Bixby, L., Brenes, G., Mario, C., & Mok, C. (2002). Fecundidad Diferencial e Inmigrantes Nicaraguenses en Costa Rica. *Notas de Población*, 74.
- Sáenz, María del Rocío, Acosta, M., Muiser, J., & Bermúdez, J. L. (2011). Sistema de salud de Costa Rica. *Salud Pública de México*, *53*, s156–s167. https://doi.org/10.1590/S0036-36342011000800011
- Sáenz, Maria del Roció, Lamy, P., & Castañeda, D. (2003). Migracion y Salud en Costa Rica: Elementos para su Analisis. *World Health Organization*.
- Singh, G. K., Rodriguez-Lainz, A., & Kogan, M. D. (2013). Immigrant Health Inequalities in the United States: Use of Eight Major National Data Systems [Research article]. https://doi.org/10.1155/2013/512313

- The Commonwealth Fund. (2019). *The U.S. Health Care System*. Retrieved from https://international.commonwealthfund.org/countries/united_states/
- Tucker, J., & McGuire, W. (2004). Epidemiology of preterm birth. *BMJ*, 329(7467), 675–678. https://doi.org/10.1136/bmj.329.7467.675
- UNFPA. (2016). Costa Rica: características y tendencias de su población. Retrieved April 14, 2019, from https://costarica.unfpa.org/es/publicaciones/costa-rica-caracter%C3%ADsticas-y-tendencias-de-su-poblaci%C3%B3n
- U.S. Department of Health & Human Services. (2019, February 1). Poverty Guidelines.Retrieved March 18, 2019, from ASPE website: https://aspe.hhs.gov/poverty-guidelines
- Vargas, J. R., & Muiser, J. (2013). Promoting universal financial protection: a policy analysis of universal health coverage in Costa Rica (1940–2000). *Health Research Policy and Systems*, 11, 28. https://doi.org/10.1186/1478-4505-11-28
- WHO. (2019a). Out-of-pocket expenditure per capita (current US\$). Retrieved April 11, 2019, from https://data.worldbank.org/indicator/SH.XPD.OOPC.PC.CD