# Health Care Disparities Around the Globe

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In Honduras, there are only 0.8 physicians for every 1,000 citizens, creating a nearly insurmountable barrier on the ability to access health care for the impoverished lower and middle classes. Various health care models that a country adopts directly affects the quality of life of its citizens, including access to care and clean water, advocacy of preventative methods, and life expectancy. By analyzing models, such as the "Out-of-Pocket", Beveridge, and Bismarck models, one can see that there are positive and negative aspects in every system. It can also be seen that the American Healthcare system is also in dire need of a reform. While Honduras is the main focus, being able to understand how barriers to healthcare arise will be essential in understanding how to bridge the gap of healthcare disparities even in places such as Appalachia. This article discusses disparities within the healthcare system itself, preventative care versus late-stage procedures, and how wellness is linked to socioeconomic status. Emphasis is placed on barriers to healthcare, which is seen in a study that took place in Honduras.

### Introduction

In Honduras, there are only 0.8 physicians for every 1,000 citizens, creating a nearly insurmountable barrier on the ability to access health care for the impoverished lower and middle classes<sup>1</sup>. These classes can only access resources that come purely from an underfunded and scarcity-riddled public sector. These barriers to accessing health care can be seen around the world as millions struggle to obtain adequate care. Someone's quality of life can be greatly affected in a negative way because of a lack of resources and care. By becoming informed on these current global conditions and systems countries adopt, one would be more aware of their surroundings and can make informed decisions regarding their own health care system. While choosing a national health care model is out of the individual citizen's control, it is important for lawmakers to realize the effects that a model can have directly on the population. Various health care models that a country adopts directly affects the quality of life of its citizens, including access to care and clean water, advocacy of preventative methods, and life expectancy. In a previously published study,

regions of Honduras studied the percentage of people who have access to clean water and specialized procedures, which varied among class to affect quality of life. Further, needs such as clean water and the access to health care are basic human rights that are integral when discussing the ethics of healthcare.

# Background

In order to evaluate the effect that health care systems have on quality of life, one needs to understand how exactly the models work. The simplest of the four models is the "Out-Of-Pocket'' model. This system is adopted by India, South America, and regions in Africa. This is not an official system as it does not offer "mass medical care"<sup>2</sup>. This model restricts those who do not have the ability to pay for medical or dental attention, and there is no program in place to help those in need of it to receive care. There is also no insurance to help cover costs, and therefore if someone is in need of care then they would simply have to pay the high costs out of their own pocket with no type of government assistance. The Out-of-Pocket model is a barrier to those living in resource-reduced regions of the world, leaving

many of those who live in these areas unable to see a doctor during their entire lives. When considering how this relates back to Honduras, one can observe that living conditions in this type of system are remarkably similar to the conditions in that country. It is extremely likely for somebody living in the resource-reduced country of Honduras to be able to live an entire lifetime without ever having seen a physician or dentist. In fact, a survey administered by the HOMBRE mobile clinic sites in Coyoles, Lomitas, and La Hicaca states that a percentage of respondents indicated there was more than a three-hour travel time to access a physician<sup>1</sup>. Barriers of distance and transportation in these countries hinder the quality of care one can access.

In comparison to other countries, the system in the United States of America is difficult to categorize as any specific model because of its many intricacies. Essentially, different aspects from each model fit into the American system, most often based upon socio-economic classes. The poor in America who do not have health insurance may experience the Out-of-Pocket model. On the other hand, those who have employee health insurance may be experiencing the Bismarck model similar to Germany. The main features of the Bismarck model are that universal health care is the responsibility of the government, implementation of health policy is through small political units and government officials determine the terms of medical care. Therefore, there is an unequal balance of coverage for its citizens, negatively affecting the quality of life for low to middle income families. While countries that follow the Bismarck model may have easier access to experience insurance, they also rigid government-controlled health care, where some doctors can be considered government employees<sup>2</sup>. The benefit of this is that procedures and medications are rigorously regulated. On the downside, politicians with no medical background should not have the authority to override what a medical professional had deemed the best approach for a patient. A final model, the Beveridge, can be

seen in the care given to veterans in the US, where healthcare is provided and financed by the government<sup>2</sup>. By studying a familiar system, it is easier to compare the access and barriers to health care that are experienced to other countries' models that may be unfamiliar. It is interesting to note not only the differences but also the similarities between barriers to healthcare in both resourcereduced regions of the world, such as Honduras, and impoverished areas in the United States, such as Appalachia.

While in America we have access to clean water, pharmacies, etc., the Out-of-Pocket model inherently puts the lower class at a disadvantage and government employed doctors risks the integrity of health care by allowing health care decisions to be overseen by politicians. This shows that while a developed nations system may be seen in a more positive light by the public than a developing nation, there are still innate ethical issues that create a disparity based on economic class that needs addressed. While considering the American system of healthcare, there is unsurprisingly controversy surrounding the quality of care given to patients because of high expenditures. After some research one can see that America may not be up to par to certain prespecified standards set forth by the World Health Organization. In fact, there are many that criticize the American system for having the highest expenditures while only ranking 37th on the World Health Organization's list in terms of quality of care<sup>3</sup>. One of the issues that critics note within the American system is that it focuses on what is known as "late-stage procedures" instead of preventative care. France, who ranks number one on the WHO list, has a system that focuses more on preventative measures and advocates healthy wellness. These differences can also be seen when comparing America and Japan. For example, the United States spends about \$7,400 per person per year on health care, even though on average Americans see the doctor about five times per year. Japan, on the other hand, spends about \$3,400 per person and the citizens on average see a doctor fourteen times a year<sup>3</sup>. Some suggest that the American health system can cut their almost double than average costs while still improving conditions if the focus shifts to similar preventative techniques<sup>4</sup>. One theory why preventative care is not a priority in America is that insurance companies do not want to spend money on diagnostic tests and other screenings. It is counter-intuitive to spend more on late-stage procedures rather than to receive early testing. However, the benefit of immediate savings to the insurance companies encourages this type of thinking that results in harm to the individual customers. Instead of focusing on health and ethical decisions, this can almost be seen as a business decision. Not only can this train of thought increase the financial burden of medical expenses, but it also can have a negative impact on an individual's health. This "hold" that insurance has over citizens can increase the likelihood of a patient dying if cancers and other conditions are not caught early enough.

Similarly, there are multiple articles describing methods of reform that can be utilized to improve the quality of life among a multitude of countries. In the Journal of Public Health, Han argues that those living in disadvantaged countries are in a medical poverty trap because there is a financial barrier to access health care services and are at financial risk due to easily contracted illnesses. According to a World Health Organization definition of health care systems, the model should work towards "improving the health of the populations they serve, responding to people's expectations, and providing financial protection against costs due to illness". Han also describes some health care reforms that are being adopted by various countries, in order to improve access. China and Zambia are trying to reform their health care system for low to middle income brackets by providing universal health care to all of its citizens. Vietnam, Mexico, and China again are trying to reform the system by also providing health insurance for the poor who may not previously have had insurance. Mexico's insurance reform

successful based was deemed on its implementation of allowing "free access to an explicit set of health care services" at the time of the procedure. However, one shortcoming of these strategies is that health care providers develop a demand inducing behavior if the patient's care is being covered by universal health care . Over time, a demand inducing healthcare approach can develop into the paradigm of the physician/patient relationship, where physicians recommend treatments whose costs actually outweigh any possible medical benefits. In other words, it is hypothesized that some physicians use their power to influence their patients to make particular choices, thus creating their own demand. While this has the ability to alter delicate market demand, the main detractor of demand-inducing behavior is that physicians violate the oath of duty and make decisions based on lining their own pockets instead of what is in the patient's best interest. Since the 1970s, one study's research focuses on the disparities of health care models within the system itself. This means that the researchers are actually medical students who shadow, work, or intern in various medical facilities around the world, and are able to assess the barriers keeping patients from receiving care as well as the limitations they may encounter as health care providers in different countries. Currently, John Hopkins university in the US and Emory University in the UK are involved with this study, with efforts to expand it to other countries .

By evaluating the Honduran system, one can see further separations between a public and private sector, serving different socioeconomic classes unequally. The public sector consists of the Ministry of Health and Social Security, while the private sector consists of "for-profit and non-profit institutions," meaning that the private sector is funded by financially well-to-do institutions or big businesses, while the public sector, which is what the majority of the citizens find participating in, uses themselves funds from provided the government and appropriated to help a large population of

people . The private sector only accounts for the wealthiest 10% of the population in Honduras . Therefore, the lower and middle classes are already at a disadvantage compared to the extreme upper class. It is important to note that the majority of the population are the lower and middle classes, and they receive less resources and less quality care than the wealthy ten percent. By developing the system into two sectors, the Honduras government inadvertently automatically puts most of its citizens at a disadvantage because access is differentiated between those of different class status. Most of the medical facilities are located in the large cities and easily accessed by only the wealthiest in the nation . The wealthy are able to obtain the most resources and a higher quality care than the lower classes. Those living in the most destitute areas of Honduras struggle to obtain clean water supplies, sanitation stations, transportation to medical facilities, and financial stability to pay for any type of procedure. As one can observe from studying the Honduran health care system, there is a significant discrepancy between the quality of care given to its citizens based purely among class status.

In order to evaluate the quality of life of citizens from three different regions in Honduras, a survey from the Honduras Outreach Medical Brigada Relief Effort was taken<sup>1</sup>. This survey assessed the distance it takes to travel to a clinic, when citizens see a physician or dentist, specialized procedures available, and the barriers that keep citizens from seeking health or dental care. After observing the results of the survey studying the access and barriers presenting to Hondurans concerning health care, there were four main reasons Hondurans listed for seeking out healthcare. 95% of respondents said "feeling ill", 51% said preventive care, 43% said to obtain medication and 17% said prenatal care was their reason for visiting a healthcare facility<sup>1</sup>. As one can see by the numbers, almost all of the respondents said they seek health care when ill. On the other hand, a small fraction of the population seeks prenatal care or preventative care. The limitations to health

care in Honduras have made prenatal care a rarity, while in America and other countries this is commonplace. Only about half of Hondurans (giving consideration this study included both rural and urban areas) seek healthcare for preventative measures.

One aspect of the survey is to analyze the proportion of the population for each town that are "never able" to obtain "blood tests, radiography, see specialist." or а Questionnaires were also given to examine how many were able to receive care from a physician within the past twelve months and the travel time it takes one to reach the physician. When comparing results from the three different areas, 70% of citizens from the rural town of Lomitas were not able to see a physician from the last year, which is staggering higher than the 28% of those living in the urban town of Coyoles who did not see a physician within the last year<sup>1</sup>. This data shows that there is a disparity among access throughout rural and urban regions of Honduras. Adding to this, the travel time for those living in an urban area with more resources, was less than 30 minutes for 59%. This can be compared to the 58% of people who had a greater than 3- hour travel time from Lomitas. The conclusion from this is that these statistics on travel time and physician access prove there is a significant health disparity between rural and urban regions of Honduras.

By purely comparing the travel times it takes for citizens to access a physician, one can observe that there is a discrepancy between the accessibility of health care providers for the lower class compared to the wealthier class. To hit this observation home, access to specialists, blood tests and radiography are also compared between classes, which shows how the lower class, who are supported from the public sector, are provided with less quality care, less resources, and less accessible than the wealthy private sector.

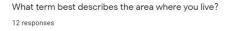
# **Primary Research**

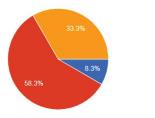
A small-scale survey similar to the one given in Honduras was created and the results

Urban

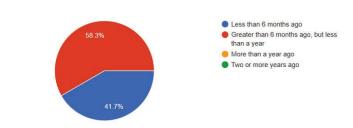
Rural

Suburbar





When is the last time you visited the dentist?



Select all of the following reasons why you may refuse to seek medical or dental care?

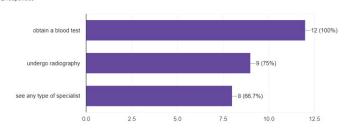


Figure 1. Survey questions and responses

were compared to the trends of the published study. First, respondents were categorized based on their geographical location (urban, suburban, or rural). Then, questions evaluated the distance to the nearest hospital, the last time they saw the dentist, why they refuse to seek medical or dental care, and the medical services they have access to. As seen in the figure below, 8.3% of the respondents were urban, with the majority of 58.3% being categorized as rural. Therefore, the responses greatly reflect the rural American lifestyle. The majority of respondents at 83.3% stated that there was a less than thirty-minute drive to the nearest hospital. This means that medical facilities are easily accessed by Americans, if at least regarding simply distance. Contrary to Pearson, when evaluating dental visits, all responses said they either saw a dentist less than six months ago or greater than six months ago, but less than a year ago. This is unexpected due to lack of accessibility of dental predicted insurance and it that was respondents would not have seen a dentist in over a year.

First, for both the rural Americans and the

Check the following medical services you have access to 12 responses



rural Hondurans, "cost" and "cannot take time off work" were significant reasons for not being able to seek medical or dental care. This suggests those with lower income or those living paycheck to paycheck are unable to afford decent healthcare whether that's based on not only physical costs, but also loss of wages due to the time they are not working. The parallels between citizens of two very different regions of the world, show the underlying barriers that impact the decision on whether or not to obtain medical services. However, the discrepancy between the quality of life regarding access to health care can be seen between these two countries in the last figure. It is unexpected to see that 100% of the respondents in the survey stated that they had access to obtain a blood test. The responses for undergo radiography and see a specialist were also well above average at 75% and 66.7% respectively. For the rural town of La Hicaca in Honduras, only 28% of respondents were able to obtain a blood test and 34% had access to a specialist.

Once these various factors, such as distance, demographics, and the availability of

preventative care, and the specific healthcare model adopted by a country are taken into consideration, the underlying ethical issue behind why healthcare disparities exist in the first place can be seen. While a country's healthcare model may innately put the lower and middle classes at a distinct disadvantage, by not providing information to the general public on these models or promoting healthcare education to the masses, the government can keep these disparities in place for years to come. The lack of education and accessibility is an ethical issue that can be seen in even the most industrialized countries, such as America and Germany. Only open dialogue government, citizens, between the and researchers can offer a discourse on ways to healthcare disparities limit between socioeconomic classes.

#### **Competing Interests**

The author declares no competing interests.

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