

DISSEMINATING INFORMATION AND RAISING AWARENESS ABOUT HEALTH DISPARITIES TO STUDENTS
AT THE ELEMENTARY, MIDDLE, HIGH SCHOOL AND COLLEGE LEVELS

by

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The purpose of this Signature Honors Project was to effectively educate and raise awareness about health disparities to students at all grade levels. This was accomplished through the collaboration of multiple departments and organizations at East Carolina University (ECU) and in the community. In order to fulfill the purpose of this project we separated this endeavor into two parts. The first part of this project aimed to educate students in elementary, middle and high school about health disparities in a way that was relevant and relatable. To do this, we incorporated the recent COVID-19 pandemic into our project. The second part focused on the ECU student population to increase awareness about food insecurity, another prevalent issue concerning disparities in health.

Disparities in healthcare is a major concern in the US and worldwide and refers to preventable differences in the burden of disease, injury, or opportunities to achieve optimal health that are experienced by socially disadvantaged populations. This is driven by factors like race, ethnicity, income, geographical location, and more. COVID-19 is something that has exacerbated the prevalence of health disparities in a variety of ways. Knowing why and how some populations suffer disproportionate health disparities and what role the environment, socioeconomic status, and healthcare access play in that suffering is important to understand not only from a social justice standpoint but for improving our nation's overall health and economic prosperity. It can be shocking for some to learn that outcomes in health deal with more than just who your doctor is and the type of medication you take. With the onset of the COVID-19 pandemic it is important that students now more than ever begin to understand how socioeconomic factors in the community impact accessibility, affordability, and quality of healthcare. This is why I started an educational initiative for students at all grade levels to learn about factors that lead to inequitable health outcomes. Education on health disparities has been effectively integrated into public health courses at the graduate and undergraduate level as well as medical school curriculums. However, I wanted to introduce this topic to students at earlier grade levels. To do this I started a project to create lesson plans for students in elementary, middle and high school to learn about the intersection between COVID-19 and health disparities.

I worked with the Center for Health Disparities, the Center for STEM Education and 3 local teachers in the Greenville community to design activities that educate students about how different socioeconomic factors can impact health which has become particularly evident with COVID-19. I also got members in Students for Equitable Health Outcomes (SEHO), a student. Organization that I founded at ECU, to get involved. SEHO brings together students who are passionate about enacting health equity in the community to be a part of projects, community based participatory activities, research, and more. I challenged SEHO members to think of ways COVID-19 impacted the community and caused barriers in health. The goal was to expand members understanding of how COVID-19 and health disparities impacts different aspect of health (mental health, physical health, nutrition) and not just the obvious spread of virus and symptoms. SEHO members that contributed researched and wrote paragraphs about the intersection of COVID-19 and Health Disparities. Some of the topics they wrote about include How COVID-19 has affected neighborhoods in food deserts experiencing food insecurity; How racial and ethnic minority groups are being disproportionately affected by COVID-19; The decrease of mental health from those who have been negatively impacted by COVID-19 (those who have lost their source of income, those who have lost their homes); How the closing of gyms have caused poor physical health

and wellness during the pandemic; Unequal access to COVID-19 testing/ vaccines. All these things probably aren't the first things that come to mind when you think of ways the pandemic has impacted health outcomes which is why it is imperative to teach others, especially younger students, about how health disparities can impact multiple facets of the community.

In order to implement the created lesson plans into the standard curriculum, I reached out to multiple school districts in North Carolina and presented at the Bridging the Gap State Conference for teachers and educators. We provided them with resources to access custom made worksheets, PowerPoints, activities that teach students about COVID-19 and health disparities. In creating these lesson plans we also made sure that topics coincide with the curriculum standards and overlap with subject areas in ELA, Science, Social Studies and Math.

In order to educate and spread awareness about health disparities at East Carolina University I started a student organization called Students for Equitable Health Outcomes (SEHO). I knew I could play an important role in developing a platform for students from various disciplines to engage in projects, research, and volunteering to enact health equity and close the gap in health outcomes. Projects through SEHO allow students to engage in community-based research, interdisciplinary collaboration, and university-community based partnership approaches with a direct impact on health outcomes. We strive to advocate, educate and raise awareness for health as a human right. I also developed an interactive info-graphic styled table to raise awareness about food insecurity for college students at East Carolina University. I worked with multiple departments and organizations at ECU and in the Greenville community to complete this project.

Food insecurity refers to situations where people don't have reliable access to nutritious food. This could mean that there isn't enough food produced. But it could also mean that people don't have enough money to buy food, or access to transport to get to the places where food is sold. People experiencing severe food insecurity skip meals or go hungry because they lack sufficient resources to access food. In North Carolina more than 1.5 million households do not have enough food to eat each day. North Carolina has the 10th highest rate of food insecurity in the nation. Day to day hunger isn't just an immediate problem; it has lasting effects too. Over the past decade, a growing body of research has linked poor nutrition to poor health outcomes, particularly in patients with chronic diseases such as heart disease and diabetes. This can stem from not only a lack of food but also an excess of unhealthy food that can cause obesity and contribute to other health problems. For many, this could be because they live in a food desert, where there are no grocery stores within a mile of their home, or because unhealthy food may be cheaper and easier to access. But for millions of people in the United States, eating enough nutritious food is far easier said than done. Certain groups living in the United States face additional barriers and risks when it comes to nutrition and health, particularly during the COVID-19 pandemic. Some of these barriers can be linked to income, where you live, race, and more. I believe that food is a basic human need, something we all deserve to have access to. A common myth is that food insecurity exists because there is not enough food however this is false. 40% of food in the US goes to waste, this is equal to 165 billion pounds per year! That amount is more than enough to feed every hungry person in the country. Nutritious food is not scarce it's just not given to the people who need it

most. My mission is to inform others about this especially since it is an issue that is prevalent and detrimental to so many communities within North Carolina.

This issue is important to me specifically because I grew up in Winston Salem specifically Forsyth County where there are 21 food deserts and it's ranked seventh on a national list of metropolitan statistical areas with the highest rate of food hardship. I have volunteered at several food banks and have seen the impact of food deserts on the people in my community, this is my motivation for starting this project. I hope to see the difference this initiative will have on students and the community around me.

This table will be implemented into ECU's student center where students can sit eat, study and have conversations about the information on the table. This is a relevant and appropriate space to learn about this topic and to raise awareness as well as inspire others to start initiatives to combat this issue. To measure engagement and understanding I created a survey that students can take by scanning the QR code in the center of the table. I decided to incorporate a research component to see if this is something that truly helps teach students at ECU about issues surrounding health disparities and food insecurity.

Through this creative endeavor I was able to learn how health-related issues overlap with education. I believe knowledge is power. Providing education about health disparities is the first step in decreasing the rate of preventable illnesses and creating a sustained level of awareness about a very prevalent issue. I hope to expand the reach of this project so that more students can learn about health disparities.