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Final Project Writeup

Through this data communication campaign, I aimed to raise awareness among the public that the healthcare system in the United States is flawed, and that government subsidies and industry bias are perpetuating this issue. The United States food system and dietary patterns have contributed to poor health outcomes such as obesity, diabetes and cardiovascular disease, especially among vulnerable populations. The guidelines steer public and institutional purchasing, subsidies, and food production. They affect what is grown, how it is grown, and therefore have consequences for land, water, greenhouse gases, biodiversity and resilience. Our government has contributed to an agricultural system that is less sustainable, more resource-intensive, and extremely harmful to public health.

To display this issue effectively, the first dataset I chose compared healthcare spending as a percentage of GDP from years 1980-2023 for ten of the world's most developed countries. I retrieved this dataset from the commonwealth fund. I uploaded my data in flourish and designed an interactive bar chart race visualization that flowed with my website's color scheme. I also made a chart showing healthcare costs per capita, utilizing flourish and kept my color scheme consistent. Next, I used two images taken from the commonwealth fund comparing health system performance of the same 10 countries as the first dataset, and then health system performance compared to spending. I changed the color of the charts to look nicer with my website design. Finally, I used data and made a bar chart in order to visualize the top ten commodities receiving subsidies in the United States.

I thought that the best way to tell a story with my data was to utilize the parallax effect we learned earlier in the semester. I find this function to be extremely effective for storytelling, it helps to keep the user engaged and provides explanation to each visual. Grow text was also a fun element I chose to add to help with reader engagement. Additionally, I decided on an appealing color palette and worked to make my visuals match with the theme as best as possible. This was

pretty difficult, as they do not match quite well, but it was fun to give it my best shot. Throughout this process, I found that data communication works best when the data display is appealing, interactive, to the point, lacking bias, and properly sourced. I went down so many rabbit holes of information because of the complexity of this topic, so focusing on a clear message and a comprehensive story became difficult. I think if I were to continue this project, a different layout would be needed to account for all of the data necessary to dive into these sorts of issues.

Before last year, I was never aware of the importance of food as medicine, and I feel that if more Americans understood the power of healthy eating, this paradox between spending and health outcomes would cause more of an outrage. We cannot keep letting big ag and big pharma get away with this. Nutrition education needs to be more common, fruits and vegetables need to be cheaper, and stricter regulations need to be placed on ultraprocessed foods.

<p>Thanks for an awesome semester! I hope to keep coding in the future!!</p>

Sources:

Matthews, Emily D., and Emma L. Kurnat-Thoma. "U.S. Food Policy to Address Diet-Related Chronic Disease." *Frontiers in Public Health*, vol. 12, 16 May 2024, article 1339859, PMC, https://pmc.ncbi.nlm.nih.gov/articles/PMC11141542/.

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Blumenthal, David, et al. *Mirror, Mirror 2024: A Portrait of the Failing U.S. Health System — Comparing Performance in 10 Nations.* The Commonwealth Fund, Sept. 2024, https://www.commonwealthfund.org/publications/fund-reports/2024/sep/mirror-mirror-2024.