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Lang Prize

31 March 2025

Lang Prize Reflective Essay

I wrote the essay “Clicks, likes, and shares: How Online Health Misinformation is Undermining Modern Healthcare and Implications for Healthcare Professionals” as part of UWP 104F: Writing in the Health Professions (taught by Dr. Scott Herring) during winter quarter 2025. For this assignment, Dr. Herring gave students 2 options for the essay’s prompt: one focused on writing a detailed explanation of a health-related disease or procedure, while the other asked “*What do you think is the most pressing issue facing healthcare today?*”. As a NPB major with a strong interest in healthcare, I was immediately drawn to the second prompt and chose to focus on the topic of health misinformation. I selected this topic because it felt very relevant given the rise of COVID-19 misinformation during the pandemic. During lockdown, I remember reading countless articles and online discussions about how COVID-19 misinformation shaped public perceptions of medicine and fueled skepticism. Beyond the pandemic, I have also noticed how easy it is to access medical information about symptoms and diseases in today’s modern digital environment. A quick Google search for headache symptoms can provide a long list of possible diagnoses and treatment options, with some online sources more reliable than others. This ease of access, while empowering in many ways, also makes it difficult for people to distinguish between reliable and inaccurate information. Since the essay was assigned to be written with an audience of healthcare professionals in mind (such as in the style of an editorial), it offered me the perfect chance to explore this topic at a deeper level and analyze its impact on the patient-provider relationship.

For this essay, Dr. Herring encouraged students to think about our topics through a more nuanced perspective using academic and peer-reviewed sources to illustrate our points instead of general medicine websites, such as WebMD or MayoClinic, that focused on addressing a layman audience. I began my research with Google Scholar, which was a tool that I was familiar with using from other writing courses to find academic articles. My initial search involved terms like “health misinformation” and “social media health rumors”. After a couple of rounds of searches, I felt overwhelmed by the sheer volume of results. I clicked through the top results of each search and skimmed through the abstracts and took brief notes on articles that I felt focused on misinformation on health-related topics. I quickly realized that many of the studies I initially found lacked the specific focus I was looking for. Some broadly examined people’s general beliefs about health misinformation, while others were too advanced and focused on complex mathematical models to track the spread of misinformation.

It wasn’t until a visit at my UWP 104F class from Ruth Gustafson, a STEM librarian from Shields Library, that I was able to gain better clarity on refining my research process. During Ruth’s presentation, I learned about PubMed’s MeSH terms, which serves as a database of key terms that PubMed uses to pull up searches on certain topics. Using this database, I searched the term “social media and healthcare” and 0 results popped up. Additionally, I searched the term “misinformation” and saw that it was categorized under broader “communication” studies rather than having a specific sub-topic on misinformation itself. Since digital health misinformation is still an evolving field, I wasn’t surprised by this and luckily I was able to find more research articles with the help of UC Davis Library’s advanced search feature. Ruth demonstrated to students on how to properly use the campus library’s search engine to better refine our research. I learned about the use of advanced search features like Boolean

operators (AND, OR) and the wildcard symbol (*) alongside how to enter in specific keywords to narrow my search. Additionally, I learned how to filter out non-relevant search results (such as those in different languages or media types) to make it more efficient for me to explore relevant articles.

After Ruth's visit, I was able to build off the articles I initially found by using the "cited by" feature in Google Scholar to discover additional sources and read through their abstracts to determine if they were relevant for my research. I tried searching more specific terms, such as "social media algorithms and health misinformation" or "physicians and health misinformation" and I eventually stumbled upon a great review article ("Systematic Literature Review on the Spread of Health-related Misinformation on Social Media" by Wang et al. 2019) that helped me hone in on more specific aspects of my topic, such as the impact of misinformation on vaccination or smoking behaviors and background concepts behind the spread of misinformation (such as seminal rumor theory and confirmation bias). I took notes on this review article and was able to click on the other cited articles within this article to learn more about different topics to better refine my search.

This review article opened the door to help me find more diverse articles not found in my initial literature searches, such as a policy report from the World Economic Forum or an informative report from the Council of Europe. From this review paper, I was able to use additional source and keywords in my Google Scholar search for a more nuanced focus on my topic, such as "vaccine misinformation," "confirmation bias and healthcare misinformation", "fear-mongering and healthcare," and "physician burnout and misinformation". Additionally, I used the references page in each article to discover additional sources and read through their abstracts to determine if they were relevant for my research. I prioritized selecting recent articles

(5–10 years) for up-to-date research but included older studies for valuable background context. This strategy helped ensure a well-rounded analysis and allowed me to dive deeper into how misinformation impacts healthcare in specific contexts, such as its effects on public health or the wellbeing of healthcare professionals themselves.

During my search, the library's "Get it at UC" feature was extremely useful for me to access research articles from journals without getting a paid subscription. Additionally, the library's VPN provided access to research articles for my essay when I was studying off-campus. My original essay was a total of 8 pages with 11 references that included peer-reviewed sources verified from Ulrich's. I submitted this essay at the end of winter quarter, and during my research process for the essay, I stumbled upon the Lang Prize on the library's website. In UWP 104F, Dr. Herring encouraged students to share their writing pieces with on-campus writing journals and organizations. Hearing this made me consider applying for the Lang Prize, and after discussing it with Dr. Herring, he encouraged me to go for it.

In revising my essay for this application, I aimed to provide a more comprehensive overview of the spread of health misinformation by incorporating additional background context. I also sought to refine my focus by proposing clearer, more specific solutions tailored to healthcare professionals, since my original essay primarily addressed the issue more broadly. To strengthen my analysis, I revisited the literature and integrated additional sources to support my revisions. I wanted to find more sources focusing specifically on the role of healthcare professionals in addressing this issue and I was able to book a meeting with research librarian Melissa Browne to go over my questions. Melissa was able to kindly point me in the right direction with some keywords and boolean operators in our search through the UC library databases (i.e. "healthcare professionals OR misinformation AND public health",

“misinformation OR public health OR propagate OR network OR social media”) and we stumbled upon some articles for me to use. After reading through these articles, I chose (“Roles for Health Care Professionals in Addressing Patient-Held Misinformation Beyond Fact Correction” by Southwell et al. 2025 and “A Narrative Review on The Impact of Online health Misinformation on Patients’ Behavior and Communication” by Lan et al. 2024) as key sources to use in my solutions section of the essay. I chose these articles since they offered comprehensive and clear explanations of the roles healthcare professionals can have in addressing this issue, whereas many other articles focused on healthcare professionals performing interventions to address misinformation or having providers’ beliefs assessed from surveys. After this meeting, I was able to modify my paper to reach 29 pages with 31 references.

At the end of writing my essay, I have come to appreciate the iterative process of research. Writing this essay allowed me to approach the topic of misleading health narratives from different angles and gain a much deeper understanding. When I first started brainstorming for this essay, I thought that addressing false health information would have straightforward solutions and I expected my findings from the literature search to support this idea, but I was mistaken. It turns out that health misinformation and disinformation are deeply complex topics with origins beyond the pandemic and in today’s modern digital environment, these issues are becoming more nuanced. My literature search findings helped me understand that these problems do not simply arise from a lack of digital literacy or fact-checking, but are also shaped by one’s cognitive thinking patterns and inherent biases. By synthesizing findings from research articles across different disciplines, I was able to construct possible solutions that are targeted specifically towards an audience of healthcare professionals in mind as Dr. Herring had intended for this assignment.

Overall, I'm quite grateful for this essay to provide me the opportunity to dive into research for this topic, and the support I received from the library's resources, as well as meetings with Melissa and Ruth, have been immensely helpful in guiding me through this process. As an Aggie, I've always known that UC Davis prides itself on being a leading research institution, but it wasn't until this assignment that I was able to truly appreciate our campus's access to numerous research databases throughout the world. And as a soon-to-be graduating senior, I wish I had taken better advantage of these resources earlier on as a student. I would definitely encourage other students to not hesitate in reaching out to the campus librarians for their research-related questions. Navigating research can feel daunting and messy at times, but with the right guidance, it becomes much more manageable.

No AI tools/technologies were used in the writing of this essay.