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Lang Prize

Reflective Essay

Background:

I wrote the literature review “Racial disparities in pain management: Exploring the causes and potential solutions” back in Fall 2025 as my final project for my UWP 104F (Writing in the Professions: Health) class taught by Dr. Lisa Sperber. I chose to write about the racial disparities in pain management because, during the ambulance ride-alongs and emergency department shifts I completed for my EMT training, I became aware of just how much clinicians’ perceptions and judgements of a patient's presentation play a role in the treatment decisions for subjective conditions such as pain. I was interested in exploring the racial disparities in pain management faced by Black patients, in particular, due to the biases I had observed in the healthcare field, hearing some healthcare professionals describe patients as being “overdramatic” or “drug-seeking.” I was not blind to the pattern of the race of patients typically given these labels.

There is extensive documentation of Black patients receiving inadequate pain management and less opioids in comparison to their White counterparts, yet I was deeply unsettled that I knew little about any mainstream interventions that had been implemented to actually address this injustice. I knew I needed to do extensive research to write a literature review that effectively explored the core factors that perpetuate these disparities as well as the interventions that could be implemented to alleviate these disparities. However, this was my first time having to do this type of research for a paper, and I was not quite sure where to begin.

Learning How to Research:

Navigating Research Databases

Prior to researching for this project, my only experience with finding academic research had been through basic Google searches. I had absolutely no experience in using research databases such as PubMed or Scopus. When I tried to start my research process on PubMed before the next library instruction session to try and get a head start, I had no idea what I was doing. I treated the PubMed search bar as if it was the Google search bar, searching up “interventions to address racial disparities in pain management in the U.S.” and receiving a concerningly short list of research papers— many of which were not even relevant to the specific focus of my literature review. I went into the following library instruction session thinking I may have to shift my research topic, since there was not enough research done on interventions for pain management disparities yet. I was soon pleasantly surprised to learn that this was actually not the case.

That class, Health Sciences Librarian Erik Fausak came in to teach us how to use the UC Davis Library PubMed and Scopus databases. He showed my class how to use PubMed's “Advanced Search” option to build and refine our searches using keywords and Boolean operators (AND, OR, NOT) to tell the database what we were looking for. I learned the keywords associated with my research question and my searches soon began to look like “Black American AND analgesia AND disparity,” which were much more successful in producing relevant results. Per the recommendation of my UWP professor, I then found a literature review on a similar topic to serve as my mentor text. This gave me more background on the keywords used in this area of research as well as other subtopics to explore that could be potentially useful in answering my research question. As I continued to refine the scope of my research subtopics,

I ended up with results lists that were of manageable lengths and included information that was relevant to my topics. Before leaving class that day, I downloaded the UC Davis Library VPN, which allowed me to continue to access the library resources off-campus on my own time.

I began my initial research on PubMed but, given the sociocultural nature of the root of the racial disparities in pain management, I soon expanded to also search on Scopus due to its wider breadth of documents from the social sciences. In scouting for relevant sources, I knew I wanted to evaluate the trends of this disparity over time as well as a range of both qualitative and quantitative measures of bias— from surveys, simulations, and statistics of actual clinical outcomes to get a well-rounded picture of the causes and potential solutions to these racial disparities in pain management. When I came across a source that appeared to be related to my topic, I skimmed the abstract and determined if it provided relevant information that would help me answer any aspect of my research question. If it appeared to be sufficiently relevant, I would copy the link into my “Potential Sources” document and add a note under the source indicating the type of paper it was and the purpose it would serve in my review.

As I got deeper into my search, I was not satisfied with the amount of research that I had found that specifically focused on interventions to address these disparities. Because of this, I had to get creative in expanding my search to find more specific examples of interventions. I began searching within the references of the sources I had already found that focused on specific interventions as well as searching for papers that cited sources that were already in my source list in order to build my own web of interconnected sources. To supplement this approach, I also searched up these papers in both PubMed and Scopus so I could sift through the “Similar Articles” lists that each database recommended.

Due to the lack of extensive research specifically focused on interventions to mitigate the racial disparities in pain management, I also chose to expand the scope of my search to include interventions to address racism in medicine as a whole. This led to the inclusion of a study conducted by Tajeu et al. (2022) that focused on utilizing online e-courses to reduce implicit bias against Black patients among non-physician and non-RN staff in primary care clinics. This source provided valuable information to guide the conversation surrounding potential methods to reduce racial disparities in pain management.

Varying my research approaches as well as my database choice allowed me to broaden the scope of my search to find more studies that would allow me to effectively answer all aspects of my research question. After repeating this process for days, I soon became overwhelmed with the sheer volume of relevant sources I had accumulated. This was when I had to learn to navigate the next challenge in the research process: organizing, cutting out, and connecting sources.

Organizing Sources

I organized my sources into a table, arranged according to their specific topics and the purposes they would serve in my literature review. I then re-evaluated my completed source list to determine which articles would make the cut before I began to fully annotate each of my sources. During this evaluation period, I skimmed through the methods, results, and conclusions of all of my sources to look for points that would justify either their inclusion or exclusion in my final reference list. For example, I decided to include a cross-sectional survey study conducted by Carrillo et al. (2025), despite the paper not specifically focusing on racial disparities in pain management or interventions for alleviating those disparities, because I needed this source in

order to provide necessary context about the health consequences associated with the lack of access to proper pain care. I also had to exclude a handful of sources once discovering that the bold claims that had been made in the abstract did not align with the scope and/or strength of what could actually be claimed from the results of the study based on its methods.

After weeding out weaker and less relevant sources, I then went back through to thoroughly annotate all of the remaining sources to further organize the evidence I needed to write my literature review. I took note of all of the relevant data I could use from each paper to explain the root causes of the racial disparities in pain management and/or what interventions appeared to be successful in addressing these disparities. It was during this analysis portion of the research process that I encountered my next challenge: making sense of conflicting data across studies.

Contextualizing Conflicting Data

When I had first drafted the outline for my literature review, I had a somewhat simplistic understanding of racial disparities in pain management. I had assumed that this was a relatively black and white issue and solution—healthcare providers' implicit biases were impacting pain treatment for Black patients, so we just need to make them aware of their own biases and they should adjust their behavior accordingly. This is why I was confused when I encountered two studies that did not fit into this mold and did not align with the general body of research on this topic. I found a study by Grant et al. (2020) that found that White clinicians with higher levels of intergroup anxiety were actually overprescribing opioids to Black patients. Then, I found a study by Hoffman et al. (2016) that found that White medical students and residents who

endorsed little to no false beliefs about biological racial differences were actually overestimating the pain level of Black patients in comparison to White patients.

When I came across these studies, I was placed at an academic and moral crossroads. I could ignore these findings and not even include them in my paper— writing them off as byproducts of a flawed experimental design that were not worth mentioning— or, I could put in the time and effort to actually try and put the pieces of this puzzle together. I knew it was not ethical nor sound practice to cherry-pick studies just to make it easier for me to build a cohesive flow of information, so I knew I had to put in the work to critically evaluate these findings and determine how they fit within this body of research.

Upon further analysis of the methods of each of these studies, I found that they were both scientifically sound and that these were not contradictions that could be explained away by a difference in study methods. I struggled to reconcile the existence of these seemingly contradictory findings to fit them into the literature review structure that I had initially planned out. However, this challenge added to the overall depth and nuance of my paper and provided necessary revision guidance as I reconstructed my understanding of how to best approach this disparity.

The one-dimensional point of view I had initially held, that the solution to these disparities would come from providers just becoming more aware of their biases and choosing not to be racist, did not effectively capture the true depth of this issue. Analyzing these sources forced me to adjust my mindset and recognize that bias in the opposite direction was something to be accounted for too. This prompted me to contextualize these findings with my knowledge of how the culture surrounding racial equality has changed over the years and how more culturally conscientious doctors are coming into the workforce now, meaning well, but

overcorrecting for known biases. This encouraged me to go back to the databases to expand my search to include terms like “intergroup anxiety” and explore how that variable affected pain assessment and treatment decisions. That opened up an entire new section of my literature review about intergroup anxiety, social pressures, and the consequences of balancing awareness of biases without structured guidance on how to address those biases. In learning to articulate the connection between these findings and their actual real-life implications, I had found the missing puzzle piece connecting all of the research findings together.

Conclusion:

This research journey forced me to do more than just summarize papers– it forced me to synthesize findings and form connections between sources that were not spelled out for me. I had to take existing isolated research and form it into something that made sense together, drawing attention to similar findings, explaining variations in the context of changing cultural attitudes, and tying everything back to real-life clinical implications. I had to change how I approached both the writing process and the research process. I had to shape my writing around the research and not the other way around. Through learning to contextualize conflicting research findings, I grew to appreciate conflicting findings as an opportunity to strengthen and provide nuance to the analysis of a topic rather than viewing them a hindrance to be pushed to the side or explained away.

AI Acknowledgement:

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