

Janae' Bonnell

The report, "Disparities in Cancer Incidence and Mortality on Native American Reservations", was written as a term paper for the course MCB 23: History of Cancer. It represents the culmination of a quarter's worth of in-depth research on a topic that I previously knew little about, but was incredibly intrigued by. Ultimately, my report is comprised of scholarship from 31 sources that I have used to discuss the topic of cancer incidence and mortality, and the implications of different factors on these rates on reservation land. Having access to an incredible wealth of academic sources through the UC Davis library was invaluable in my research, and without such comprehensive selection of information to pull from, my report wouldn't have been nearly as in-depth and comprehensive.

I began my research by entering broad search terms into the UC Davis library catalog search, looking first at "Native American cancer". This led me to many articles that gave statistics on the types of cancers that predominantly affect Native Americans, and how the rates of incidence and mortality compare to those of Caucasians. I wanted to investigate where the major differences in these rates are, not only between racial groups, but also between different regions of the country, because Native Americans are not a homogenous group. Different nations have different cultures, traditions, and environments that are reflected in their health.

The results I found in my preliminary searches served to guide the ones that followed. I had already downloaded the Library's VPN through Pulse Secure before I began this project, which helped me to quickly access the articles I wanted. Between this and the use of the UC Davis eLinks, I was able to access nearly all of the articles that I was interested in. These sources gave me the evidence I needed to demonstrate that there was a measurable difference in the rates of cancer incidence and mortality, so my next searches focused more on finding sources that demonstrated that this was due largely to a range of socioeconomic factors, environmental exposures, disparities in healthcare access and quality, and the Native American relationship with Western Medicine.

The authors of many of the papers from my preliminary research often alluded to certain factors that may have affected cancer outcomes on reservations. While I had some ideas about factors that may have contributed to these disparities, I allowed these to guide some of my more specific searches. I quickly discovered that using the articles referenced by papers I was already using was an efficient way to find quality sources that were specific to the information I was trying to cover. Being able to access articles that my current sources were citing allowed me to not only glean a better understanding of the information being discussed, but to also discover a more in-depth analysis of a topic or influence that may have only been briefly referenced in the original article. The "Similar Articles" sidebars on both the library website and research archives such as PubMed were invaluable for this purpose as well.

In order to fully establish the factors for cancer incidence and mortality disparities on reservations, I needed to find both quantitative evidence and personal narratives. The information sourced from peer reviewed journal articles often gave me more quantitative evidence, such as numerical values regarding cancer rates in different areas of the county. Since these works had been peer-reviewed before they had been published, I knew that the information in these papers was accurate, and I could rely on it to help build my argument. However, the piece of my report investigating how historical trauma adversely affected Native Americans' desire to seek healthcare was equally important. The ways in which this affected

people were much harder to quantify, and thus I relied more heavily on interview- and narrative-based research in order to formulate this section. While some of this information I was able to source from journals, much of it came from research found in online books. These contained quotations from people who had been personally affected by the IHS's sterilization practices, or were in other ways mistrustful of the Western Medicine being offered to them. Being able to gain insight into these peoples' thoughts helped to give a new, more human dimension to my report that I felt it had previously been lacking.

While searching for sources to support the various sections of my report, I learned to use my search results to adjust the search terms that I was using. While broad search terms such as "Native American cancer" yielded an abundance of results pertaining to the topic, they often weren't specific to the information that I was hoping to find. I had to find further search terms to use in order to narrow my field of results. When I did find a paper that gave me useful information, I paid attention to possible keywords from the title in order to further my search. In some instances, I found articles that I felt would be beneficial to my research, but I was unable to view without having to pay. Usually I was able to search for the article specifically and find it published elsewhere, thus allowing me to read it, but occasionally I wasn't able to find a way to view it. In these cases, I pulled keywords from the title and topic, which I used to find search or similar articles.

In other searches, my terms started out far too specific. In order to find information of the possible effects of living in close proximity to oil drilling, I began with searches such as "Native American oil" or "reservation oil cancer". These often yielded results that dealt with the economic effects of drilling, but gave little about the health repercussions. As a result, I had to search more broadly for the effects of oil on cancer rates in populations residing near drill sites, and thus make my searches less specific to Native Americans. Searching using terms such as "oil drilling cancer" gave me articles that investigated this relationship, which I could then apply to my report. In other searches, I discovered that I needed to perform multiple searches with different terms for the demographic. While many articles used the term "Native American", many used "American Indian", and still others used "First Nations". I began to conduct the same search multiple times, and changing between terms for each one in order to get as many results as possible. This "trial and error" approach to my search helped me to find some of my most relevant sources.

Throughout all of my searches, I evaluated each source I wanted to include in my report to ensure that the information I was using was credible and relevant. Otherwise, the results of my report would not be as impactful as they could have been. In order to accomplish this, first, I paid close attention to the publishers of the information I was sourcing. All of the information referenced in my report was sourced from either from a peer-reviewed or government publication, because I felt that these groups were the most credible. I could trust that the information I was utilizing was correct, supported by data, and obtained responsibly. Also, I tried to use articles that were published as recently as possible in order to make sure that my discussion is relevant to how cancer is affecting Native American nations today. While the dates of the studies I've referenced do span several years, I evaluated each one and concluded for various reasons that they were still relevant. Some of the slightly older sources discuss the results of longitudinal studies, and were often the most recent publication of this type that was available. With many of the publications regarding legal jurisdiction on reservation land, environmental offences, and past exposure events, I continued to use them in my report because I felt that the change in these areas over time wasn't substantial enough to

warrant discounting these sources. Also, I paid close attention to information I found repeated in multiple sources, and worked to include it in my report, since it likely had a large impact if it was repeatedly recognized.

Due to the interdisciplinary nature of my report, I made use of many different sectors of the library's resources. I depended on not only scientific databases such as PubMed, Wiley, and ScienceDirect, but also on publications from law conferences. I used the library's subject guides to find census data to supplement my report when discussing the effects of language on healthcare. I feel that the wide scope of my report gives a new dimension to the discussion of the issue of cancer disparities on reservations, because it accounts for several differing contributory factors that all compound upon each other to increase cancer incidence and mortality. During my research, a majority of the papers I read focused specifically on one factor. Those that did look at multiple factors usually did so in the form of a survey, and gave less statistical explanation.

Aside from the library's resources, I sought guidance in other places on campus. The feedback I received from my instructor and teaching assistant on my drafts was invaluable in the process of reworking my report. Also, I was incredibly appreciative to be able to correspond with a professor in the Department of Native American Studies in order to work towards making the terminology in my report as culturally competent as possible. Finally, I asked a PhD candidate in English whose class I had taken previously review my report to ensure that my work was sound. I feel that having done this report has made me both a stronger researcher and a more conscientious individual. I will be able to apply to skills I learned while doing this report to future projects, both inside and outside of the classroom.