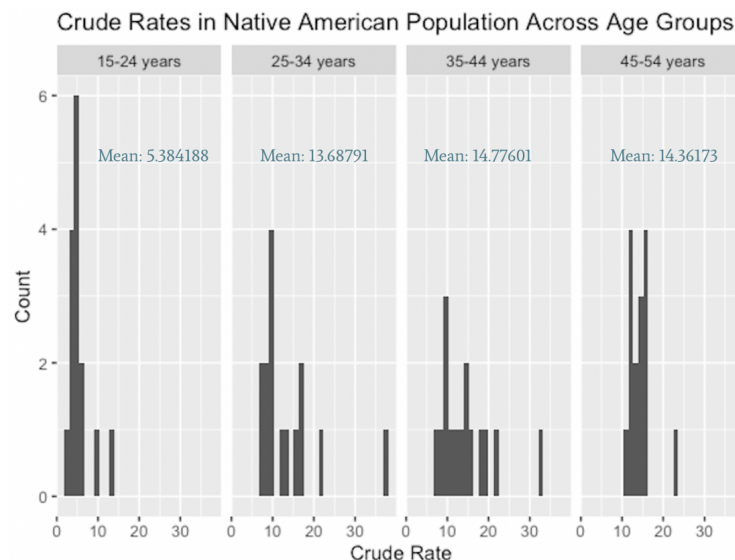


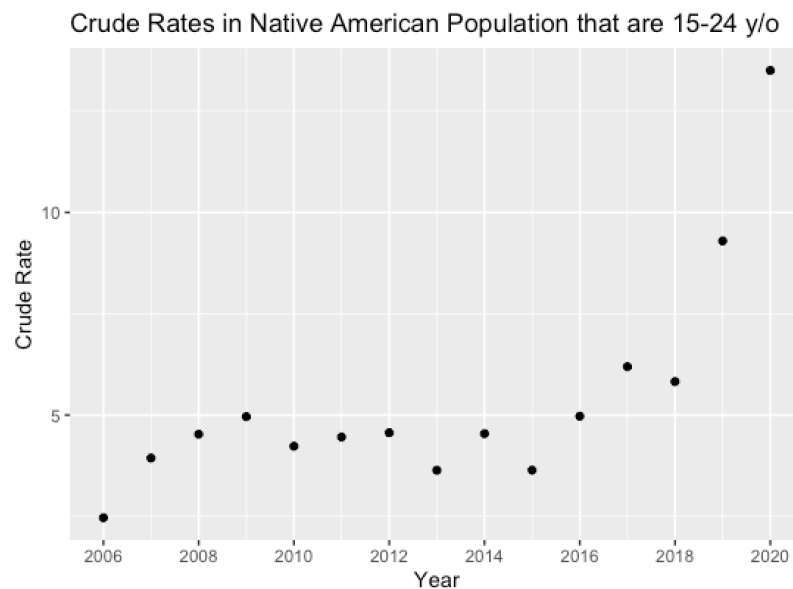
Unveiling Opioid Crisis Impact: A Study on Young Native American Overdose Mortality Rates (2006-2020)

For our final project, we decided to research the topic of opioid overdose mortality, and our overall question was ‘How can policy makers reduce opioid overdose mortality rates within the young Native American population?’. Initially, we investigated how ages 15 to 64 were affected by opioid overdose but then found that the age group of 55 to 64 retained extremely low rates, so we decided to investigate ten-year age groups from 15 to 54. We concentrated on data from 2006 to 2020 because those years consisted of when legal opioid prescriptions began [3]. We chose to focus on the epidemic’s effect on American Indians and Alaska Natives specifically, due to their unique lack of access to resources for substance abuse treatment. Many AI/AN live in a lower income bracket and therefore face implications of income inequality, such as housing instability, transportation access, and insurance status. Intergenerational trauma can also drive mistrust in the healthcare system, and AI/AN are very likely to face racism and bias by healthcare professionals. The underfunding of tribal clinics has also affected the availability of mental health treatment [1]. In 2019, the White House created a national opioid policy roadmap but did not structure it to address AI/AN vulnerabilities. Although this roadmap lays out a plan to limit opioid abuse, it does not recognize the systemic oppression and issues AI/AN individuals face due to racial inequalities [2].

The data we analyzed was from the CDC Wonder Database and we queried the data based on contributing cause of death - poisoning by opium, heroin, other opioids, methadone, other synthetic narcotics, and other and unspecified narcotics - to include every possible death due to opioid overdose. We looked at the mortality rates in the form of crude mortality rates (number of deaths from opioid overdoses per 100,000 in a given population). The Native American population’s average crude mortality rate was 12.05 and the rates were highest from 2016 to 2020.



The 15-24 year old age group had the lowest average crude opioid mortality rate and most extreme right skew out of all the graphs seen in the histograms that represent the frequency of opioid mortality rates with the averages displayed, meaning that they were the least affected.



Our analysis became more multivariate from there as we decided to look at the Native American 15-24 age group's crude opioid mortality rates over time. The scatter plot displaying the crude opioid mortality rates over time for 15-24 year olds is displayed above as Figure 2. The rate is decreasing and increasing every other year but this pattern shifts in 2018 when it exponentially increases after that.

Our study on opioid overdose mortality rates among young Native Americans from 2006 to 2020 highlighted key contributions to this alarming trend. The increased legal opioid prescriptions, coupled with inadequate awareness of the addictive properties, significantly impacted opioid-related fatalities. The COVID-19 pandemic worsened the crisis, escalating opioid misuse, particularly with the emergence of synthetic opioids of synthetic opioids like fentanyl [4]. Challenges in accessing substance abuse treatment resources, compounded by racial biases in healthcare, amplified the difficulty in addressing this issue. To address these challenges rectifying systemic healthcare disparities and promoting awareness of opioid addiction are essential. Providing culturally sensitive treatment resources and tailored interventions for these communities is imperative. Overall, the surge in opioid prescriptions due to insufficient awareness of their addictive nature, compounded by the COVID-19 pandemic, underscores the critical need for comprehensive interventions to support young Native Americans affected by opioid misuse.

Works Cited

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