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EDI Research Summary

Racial Disparities Among Substance Use Study Participants

Research is oftentimes considered the 'gold standard' in terms of objectivity. Regarded as devoid of prejudice, it is important to remember that all research is conducted by humans, who are, by nature, biased. This discrepancy is especially relevant for substance use disorder (SUD), a highly stigmatized and culturally relevant psychiatric disorder, that predominantly affects people of colour due to various socioeconomic factors. Yet despite increased risk of harmful substance use, people of colour tend to be highly underrepresented in human substance use research studies. My goal for this project was to determine the racial distribution of participants in SUD research studies, and determine factors that may contribute to any inequities.

In this project I spent most of my time conducting a narrative review of existing substance use literature. This means going through published, original, English-language studies from the past 25 years, with a focus on human research. Going through the literature by drug class, I collected information pertaining to participant racial demographics, year of publication, research institution, recruitment method, type of study, et cetera. To analyse the relative racial composition of participants per study, I converted participant information into percentages, which were then used in ANOVA (analysis of variance) testing.

From these analyses, the data shows there was a significant effect of drug class on the percentage of non-white participants. Specifically, cocaine was significantly different from all other types of drugs, and there was also a significant difference between nicotine and cannabis studies. When looking at each racial group individually, the percentage of both black and white participants was significantly different between cocaine and all other drugs, with black participants being notably overrepresented. For white participants there was also a significant difference between nicotine and cannabis. Consistent with existing stereotypes, First Nations, Metis & Inuit participants showed a significant difference between representation in alcohol studies vs all other drug classes, whereas Asian & Pacific Islander participants demonstrated a significant difference between amphetamine and cocaine. There were no significant differences for Hispanic/Latin and Multiracial participants, though this is likely due to small sample sizes. Even more interesting, is that there seem to be significant relationships between participant

demographics and both recruitment method as well as research institution, though further analysis is required to determine how exactly these variables come into play.

These findings are important as they show a significant lack of racial representation in the research surrounding SUDs. With the research literally informing the treatment methods we use to help those with SUDs, a lack of diverse, and representative, sample groups may exacerbate existing inequalities in SUD treatment. Especially when testing the efficiency of medications, the effectiveness of psychiatric therapies, or even the genetic components of substance use, limiting our research population to only represent one group may undermine the translation from research to use by medical professionals.

This project will continue throughout the 2022-2023 academic school year, as I continue to run more advanced analyses, and continue to determine the factors that contribute to the racial disparity among SUD research participant groups. This is possible through the I-CUREUS program with Carleton Learning and Teaching Services, and our goal is to publish recommendations to be used in future SUD studies.