

Social Media Infodemiology Study

Investigators

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Project Summary

Among racial and ethnic minority populations, the risk of HIV infection is an ongoing public health challenge. Pre-exposure prophylaxis (PrEP) is highly effective for preventing HIV when taken as prescribed. However, there is a need to understand the experiences, attitudes, and barriers of PrEP for racial and ethnic minority populations and sexual minority populations. This study specifically examined shared experiences from racial or ethnic minority populations and sexual minority populations. Throughout the study, the researchers used data mining approaches to collect posts from popular social media platforms including, Twitter, YouTube, Tumblr, Instagram, and Reddit. Posts were selected by filtering for keywords associated with PrEP, HIV, and approved PrEP therapies. The researchers analyzed data using unsupervised machine learning, followed by manual annotation using a deductive coding approach to characterize PrEP and other HIV prevention-related themes discussed by social media users.

Populations Served: American Indian or Alaska Native, Asian, Black or African American, and Hispanic or Latino

Goals/Aims:

- This infodemiology study aimed to leverage big data and unsupervised machine learning to identify, characterize, and elucidate experiences and attitudes regarding perceived barriers associated with the uptake and adherence to HIV PrEP therapy.

Publications/Abstracts/Posters, etc.

- [Unsupervised Machine Learning to Detect and Characterize Barriers to Pre-exposure Prophylaxis Therapy: Multiplatform Social Media Study](#). JMIR Infodemiology.
- [Impact of COVID-19 on HIV Prevention Access: A Multi-platform Social Media Infodemiology Study](#). AIDS and Behavior.