

Evaluation of Alcohol Abuse Awareness and Prevention in Tribal Communities on Facebook



¹Brandon Postoak, ¹Mason Two Crow, ¹Matt Vassar, ²Urmimala Sarkar, ³Sheila M. Alessi, and ⁴Juliet P. Lee
¹Oklahoma State University Center for Health Sciences, Office of Medical Student Research, Tulsa, OK 74107
²University of California-San Francisco, ³University of Connecticut-Health, and ⁴University of California-Berkley

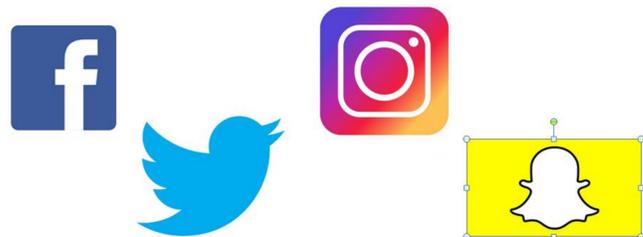
ABSTRACT

American Indian and Alaskan Native (AI/AN) populations are disproportionately affected by alcohol abuse, suicide, diabetes, and hypertension, along with many other diseases. While it is known that social media platforms have been effectively used to deliver evidence-based information to the public in general, the use of tribal social media platforms to address important public health issues is not clearly understood. Thus, we sought to evaluate how Native American tribes use their social media accounts as a resource for alcohol prevention or awareness. In order to measure AI/AN health-related content, specifically alcohol-related, we sampled the Facebook pages of twenty-seven of the most populated federally recognized tribes according to the 2010 US Census. We limited the sample timeframe to only posts made in the year 2019 to avoid conflict with COVID-19. A total number of any health-related posts, with specific attention to alcohol-related content, were recorded as a quantification of social media engagement. Although the research is still in progress, most of the sampled tribes consistently posted health-related content, however minimal evidence support that tribes utilize social media to promote alcohol prevention and awareness material specifically using Facebook. For future direction, we would like to extrapolate clinical significance from our study findings, if any, and communicate such to the sampled tribes. Our goal is understanding their perspective on the topic as well as possibly create a future initiative to bring a higher awareness regarding Native Americans and the abuse of alcohol.

INTRODUCTION

Studies show AI/AN youth have high rates of earlier alcohol use, higher risk of developing a substance abuse disorder, and more alcohol related deaths, including death (Swaim & Stanley, 2018). There are many speculations of why this holds true including genetics, socioeconomic status, and other factors, however there is not clear evidence to fully support those thoughts. Being there is no clear indicator of why AI/ANs use alcohol at different rates as compared to non-AI/AN, a different method was sought to aid in the prevention of alcohol-related health risks.

Young people are exposed to and display pro-alcohol messages and images through online portrayals of drinking on personal pages as well as unregulated alcohol marketing on social media sites. This display of alcohol behavior has been correlated with offline alcohol behavior and risky drinking (Moreno and Whitehill, 2016). Thus, the display of anti-alcohol and sobriety messages can hold the same type of impact. The study set out to determine how active AI/AN tribal social media accounts, specifically Facebook, were being used to engage their citizens and produce those messages against alcohol and promoting sobriety.



From left to right are the logos of Facebook, Twitter, Instagram, and Snapchat
<https://www.insidehighered.com/admissions/article/2018/04/23/new-data-how-college-admissions-officers-view-social-media-applicants>

METHODS AND MATERIALS

In order to measure AI/AN health-related, specifically alcohol related social media involvement/engagement, our research sample was limited by Federal Recognition status and population size. Of the 574 Federally Recognized tribes according to the 2010 Census, the forty-two most populated tribes were selected. Of these forty-two tribes, twenty-seven were further selected due to the presence of our inclusion criteria.

- We searched all forty-two tribal organizations for usage of Facebook, Instagram, Twitter, and Snapchat. Of the four social medial platforms, Facebook was utilized the most by the tribal organizations
- To avoid the current pandemic with COVID-19 and possible artifact, we selected posts from the year 2019.
- To be included as being a “health-related” post, it must include words or pictures of disease prevention or awareness, healthcare worker, healthcare location, physical activity involvement, etc.
- To be included as being an “alcohol” related post, the post must include words or pictures in the regards of alcohol prevention, promoting sobriety, alcohol risk factors, alcohol associated risk factors, etc.
- All posts were verified by both Postoak and Two Crow simultaneously. Undecidable posts are being sent to other researchers on the project



RESULTS

- With the posts averaged, there was a total of 438.8 posts made, 51.8 posts were health related, and 0.56 posts were alcohol related.
- 11.8% of posts made by tribes were health related with less than 0.13% of the posts being alcohol related.
- The tribe with the highest percentage of health related and alcohol related posts was the Aleutian Pribilof Islands Association at 28.4% and 1.35%, respectively.
- The tribe with the lowest percentage of health-related posts was the Comanche nation at 1.43%
- There are 11+ tribes who have a 0% for alcohol related posts.

Tribes	Total	Health	Alcohol	% Health	% Alcohol
Cherokee Nation	633	101	0	15.96	0
Choctaw Nation	595	58	0	9.75	0
Muscogee Creek Nation	548	65	0	11.86	0
Lumbee Tribe of North Carolina	569	38	0	6.68	0
Comanche Nation of Oklahoma	70	1	0	1.43	0
Tohono O'odham Nation	101	18	0	17.82	0
United Houma Nation	106	3	0	2.83	0
Yakama Nation	213	30	0	14.08	0
Salt River Pima Maricopa Indian Community	596	119	0	19.97	0
Tlingit and Haida	603	64	0	10.61	0
Citizen Potawatomi Nation	582	74	0	12.71	0
Southern Ute Indian Tribe	599	100	1	16.69	0.167
Seminole Nation	598	47	1	7.86	0.167
Menominee Indian Tribe of Wisconsin	593	31	1	5.23	0.169
Cheyenne and Arapaho	596	82	2	13.76	0.336
Onondaga'geh Ongwawenna	549	38	2	6.92	0.364
Chiricahua Apache Nde Nation	200	21	1	10.5	0.5
Aleutian Pribilof Islands Association	148	42	2	28.38	1.351

Table: Listed are the data sets from the tribes sampled for quantitative engagement through Facebook

CONCLUDING REMARKS

- Based on the evidence, most tribes Health-related content could be categorized as related to: Art, Culture, Seasonal, Job opportunities, Education/Language, Health-related, Tribal Welfare programs with most focus on the latter.
- The sampled AI/AN tribal organizations consistently demonstrated posting health-related content in 2019, however the number of posts addressing alcohol and its prevention was of little significance.
- Regarding the health-related posts, the content was predominantly related to domestic violence, suicide prevention, drug abuse (opioids, methamphetamines), cancer awareness, immunizations, Public Safety, Child Safety, and Missing and Murdered Indigenous Women.
- We cannot speculate as to why there is minimal alcohol posts. We anticipate an increase in the broadcasting of current alcohol prevention methods onto Facebook, or perhaps another social media platform, as a distributor of information will be largely received by the next generation
- There were limitations to the study, such as the limited sampling which excluded many other potential tribes with active Facebook accounts. Although tribes may not post on Facebook their alcohol prevention methods, it does not represent what may exist otherwise. The sampled Facebook posts, neglects the other forms of social media as mentioned before, Twitter, Instagram, Snapchat, etc.
- The aim is to bring awareness to the tribal organizations in hopes they can increase their number of posts related to alcohol prevention and awareness material.

REFERENCES

Swaim, R. C., & Stanley, L. R. (2019). Self-esteem, cultural identification, and substance use among American Indian youth. *Journal of Community Psychology*, 47(7), 1700-1713. doi:10.1002/jcop.22225
 Moreno, M. A., & Whitehill, J. M. (2016). #Wasted: The intersection of substance use behaviors and social media in adolescents and young adults. *Current Opinion in Psychology*, 9, 72-76. doi:10.1016/j.copsyc.2015.10.022
<https://www.census.gov/prod/cen2010/cph-2-1.pdf>

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