Advances in Technology in the Addiction Profession, Part III: Social Media-Based Interventions for Addiction

Presented by: LaTrice Montgomery, PhD & Shapree’ Dixon, MA, LSW
Participants will be able to describe the prevalence of social media platform use, especially among emerging and young adults.

Participants will be able to describe the strengths and opportunities for growth in the use of social media-based interventions for addiction.

Participants will be able to describe best practices when using social media as an intervention for addiction.

Which social media platforms do you use?

(1) Facebook
(2) Twitter
(3) Instagram
(4) YouTube
(5) Snapchat
(6) Other
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Social Media Usage by Income (Pew Research Center)

Most Popular Social Media Sites

Cannabis/Blunt Use
What is Cannabis?

- Cannabis refers to the dried leaves, flowers, stems, and seeds from the Cannabis Sativa or Cannabis Indica plant.
- Tetrahydrocannabinol (THC) and Cannabidiol (CBD) are the most common cannabinoids found in cannabis products.
- Cannabis is the most widely used federally illicit drug use in the United States.

Cannabis (Montgomery & Mantey, 2017; 2018)
Blunt use prevalence ranges from 4.8% (12-25 years of age) to 14.1% (Non-Hispanic Black individuals).

Prevalence is higher among past month cannabis users, ranging between 20.3% (18+ years) to 63.2% (Non-Hispanic Black individuals).

Approximately 41% of Black past month blunt smokers report heavy levels of use (i.e., 21-30 days).

**Blunts vs. Joints**

Schauer & Peters, 2018
Cannabis & Tobacco Co-Use

- Exacerbation of mental health symptoms (e.g., childhood diagnoses, depressive symptoms/diagnosis)
- Greater likelihood of cannabis use disorders
- More psychosocial problems (e.g., legal problems, decreased life satisfaction)
- Poorer cannabis cessation outcomes (e.g., slower rate of change in cannabis use than cannabis only smokers)
- Additional risks for toxicant exposure
- Elevated risk of respiratory distress and reduced lung functioning (Agrawal, Budney, & Lynskey, 2012; Peters, Budney, & Carroll, 2012; Ramo, Liu, & Prochaska, 2012; Taylor, Ferguson, Milne et al., 2002)

Blunts

- Few studies focus on the initiation, maintenance and cessation of blunt use (recent review identified only 34 studies)
- Although studies have identified effective treatments for cannabis and tobacco, young Black adults are less likely to engage in traditional evidence-based treatments
- Social media could be used as a platform to reach young adults

Twitter-Based Intervention

(Agrawal et al., 2012; Cooper & Haney, 2009; Lee et al., 2014; Montgomery et al., 2012; Schauer et al., 2017)
What is Twitter?

- Twitter is an American microblogging and social networking service on which users post and interact with messages known as “tweets”
- Users can post, like, and retweet tweets
- Created and launched in 2006
- 140 characters, increase to 280 characters per tweet

Twitter

WHERE DOES BLACK TWITTER COME FROM?
The Daily Beast

Black Twitter has existed in the sense of referring to a black community on Twitter since at least 2008. It existed somewhat quietly until about 2010, when people began to report on it. By March 2013, it became a bigger topic of discussion, and more people became aware of its existence. Since then, it has remained an important space on social media.

Specific Aims

- **Aim 1:** Characterize the norms, patterns of blunt use, treatment needs, and attitudes and preferences toward social media-based interventions for blunt use reduction and quit experiences (N = 20)
- **Aim 2:** Develop and pilot test (N = 20) a Twitter-based intervention to encourage engagement in discussions that promote blunt use reduction
- **Aim 3:** Conduct a small randomized clinical trial (N = 40) to test the feasibility, acceptability, and initial efficacy of intervention for blunt use
Twitter-Based Intervention for Young Adult African American Blunt Smokers

- Inclusion Criteria:
  - Between the ages of 18-29
  - Self-identify as African American or Black
  - Self-report daily or near daily blunt use in the past month
  - Ready to set a goal to reduce or quit blunt use
  - Active social media user

Aim #1

Qualitative Themes

- Participants preferred to refer to blunts as joints
- Participants described how the quality of cannabis impacts how blunts are made and smoked
- Participants discussed norms regarding when and how blunts are smoked in groups
**Introduction**

**Self-Awareness**

**Reasons to Quit**

**Encouragement**

**Social Support**

**Coping with Stress**

**Education/Health Issues**

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**SAMPLE QUESTIONS:**

- Have you told any of your friends or family about your goal to quit or reduce your blunt use? Why or why not? (Social support)

- Dealing with stress is stressful! What do you do when you are stressed out? What are the best ways to deal with stress? (Stress management)

- Are you interested in cutting back or in quitting blunts? What is your goal for this month? (Self-awareness/Reasons to quit)

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**Intervention Development**

- Automated, 30 day private group intervention
- Survey at baseline and end of treatment
- Daily text messages/emails

**Primary outcomes:** (1) average number of participant tweets (engagement), (2) likability of the intervention (acceptability)

**Secondary Outcome Measure:** (1) self-reported number of days of blunt use in the past month, (2) self-reported number of blunts smoked per blunt using day, (3) readiness to quit blunt smoking, (4) belief in ability to quit (or reduce) blunt smoking
Baseline/End of Treatment Survey
Survey Questionnaires (modified to focus on blunt use):

- Demographic/Blunt Use Questions
- Cannabis Abuse Screening Test
- Fagerstrom Test for Nicotine Dependence
- Cannabis Withdrawal Scale
- Thoughts about Abstinence
- Short Inventory of Problems
- Readiness to Change
- Brief Situational Confidence Questionnaire (end of treatment)
- Acceptability Questionnaire (end of treatment)

Intervention Development

- Recruitment in Ohio vs. U.S.
- Recruiting young adults who are ready to quit
- Screening survey follow-up via phone
- How to keep participants interested as group forms
- Handling inappropriate behavior in the group
- How to ensure that the group remains private
- Researcher involvement in the group
- Other cannabis use

Research Focus:
- Prescription Drug Misuse & Cannabis Use
- Substance Use among Racial/Ethnic Minorities
- Intersection of Substance Use and Mental Health
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STAND Intervention
Facebook

- Target: Tobacco Use and Heavy Episodic Drinking (HED)
- Population: Young adults (18-25 yrs.)
- Three stages:
  - Exploratory
  - Development
  - Usability-testing
- Eligibility
  - Smoked ≥ 100 cigarettes (lifetime), current smoker (≥4 days/week), HED in past month

STAND Intervention
Exploratory: Focus Groups

- Three online focus groups (90 min)
- Electronic survey
  - Sociodemographic, smoking and drinking behaviors, readiness to quit (smoking and drinking)
  - Qualitative data
    - Open ended question: tobacco and alcohol use, social media use, intervention preferences
- $20 incentive for participation

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STAND Intervention Development

- Participants
  - Young adults (18-25yrs.)
  - Smoked ≥ 100 cigarettes (lifetime), current smoker (≥4 days/week), HED in past month, used Facebook ≥3 days/week
  - Baseline assessments online
    - Stage of change (smoking)
      - Ready/Not ready

STAND Intervention Development (cont’d)

- Two private Facebook groups
  - Based on readiness to quit
- Three daily posts to each group (30 days)
- Follow-up survey
  - Usability
  - Post-study assessment
- $20 incentive for active participants
- Data Extraction

STAND Intervention Development: Focus Group Themes

- Contexts of alcohol and tobacco co-use
  - Social settings
- Behavior change
  - Examples of attempting to stop smoking & drinking
- Participating in a Facebook intervention
  - Mixed feelings
  - Low perception of effectiveness
- Intervention feedback/suggestions
  - Requested daily posts
  - Target alcohol and tobacco separately
STAND Intervention

- 90 post per group (Ready/Not ready)
  - Less than 25% of posts for each group targeted both alcohol and tobacco
- Ready group
  - Preparation stage of members for changing use
  - Incorporate behavior change strategies
- Not ready
  - Target ambivalence
  - Increase motivation to change

(Ramo, Meacham, Kaur, Corpuz, Prochaska, Satre, 2019)

STAND Intervention

- Alcohol content
  - Health and social relationship impact from drinking
- Tobacco content
  - Greater readiness among participants to reduce smoking
- Visuals used for posts
  - Stock photos from online sources
  - Avoided images of cigarettes and alcohol to prevent potential triggering

(Ramo, Meacham, Kaur, Corpuz, Prochaska, Satre, 2019)

STAND Intervention

Usability

- 66 eligible participants
  - 37 completed baseline survey & invited to participate
    - 29 individuals
      - 21 = Not ready; 8 = Ready to quit smoking
  - Follow-up survey
    - Not ready: 16 out of 21
    - Ready: 7 out of 8

(Ramo, Meacham, Kaur, Corpuz, Prochaska, Satre, 2019)
STAND Intervention
Usability (cont’d)

- Overall rating
  - 91% of follow-up survey respondents
  - Rated easy to understand
- 83% reported the intervention provided sound advice
- 87% would recommend
- 62% rated posts as helpful
- 70% clicked on informational links in posts

(Ramo, Meacham, Kaur, Corpuz, Prochaska, Satre, 2019)

Picture Me Smokefree

Facebook

- 12-week smoking cessation and reduction intervention
- Photovoice
  - Participant-driven photography
- 60 Young adults
  - Ages 19-24 (M = 21)
    - Active smokers (some interest in quitting) or past-year quitters

(Haines-Saah, Kelly, Oliffe, & Bottorff, 2015)
Picture Me Smokefree Procedure

• One post per week
  – Original photo and caption about smoking cessation journey
  – Active: Posting, commenting, sharing links, liking other posts
  – Reminders
  – $10 incentive/per active week

(Haines-Saah, Kelly, Oliffe, & Bottorff, 2015)

Picture Me Smokefree Procedure (cont’d)

• Posts
  – Reflected personal experiences pertaining to journey with smoking cessation
  – Family life and personal relationships
  – Work and school settings

(Haines-Saah, Kelly, Oliffe, & Bottorff, 2015)

Outcomes

• Wide range of smokers
  – 42% daily, light smoker (5 ≤ cigarettes/day)
  – 15% heavy smoker (15-20 cigarettes/day)
• At follow-up (39/60)
  – 10% quit smoking during participation
  – 51% reduced smoking
• Higher participation among women
  – Completed more weeks and posted regularly

(Haines-Saah, Kelly, Oliffe, & Bottorff, 2015)
Picture Me Smokefree
Outcomes (cont’d)
• 39 out of 60 completed follow-up
  – Overall experience: 79% rated 8/10 or higher
  – Relationship between high levels of participation and completed survey
• 32/39 of follow-up respondents engaged for 9-12 weeks

(Haines-Saah, Kelly, Oliffe, & Bottorff, 2015)

Picture Me Smokefree
Feedback
  • Qualitative feedback
  • Online survey and 1:1 interviews
    – 22/60 participants
  • Positive experience, nonjudgmental, supportive
  • New information and diverse perspectives
  • Artistic creativity
  • Reinforcement for cessation (daily reminders)

(Haines-Saah, Kelly, Oliffe, & Bottorff, 2015)

• Suggestions
  – Increase within-group interactions
  – Structure activities (e.g., surveys, contests)
  – Create offline support meetings
  – Provide prompts for posts

(Haines-Saah, Kelly, Oliffe, & Bottorff, 2015)
Conclusions

- Supported feasibility
- Potential to engage young adults for tobacco cessation/reduction
- Social media increases level of interaction and ability to learn from others’ experiences
  - Mutual support

(Haines-Saah, Kelly, Oliffe, & Bottorff, 2015)

Benefits Social Media Based Interventions

- Accessibility
  - No insurance required
- Engagement
  - Tailoring
  - Social Support
  - Reminders
- Social
  - Virtual sense of community
  - Support from peers on the same journey
- Cognitive
  - Learn new information
  - Simplifies communication (decreases distraction)

(Haines-Saah, Kelly, Oliffe, & Bottorff, 2015; Milward, Drummond, Fincham-Campbell, & Deluca, 2018; Moreno & D’Angelo, 2019; Ramo et al., 2019)

Limitations of Social Media Based Interventions

- Privacy concerns
- Less flexibility to tailor to specific needs
- Limited face-to-face interaction with facilitators
- Low perception of effectiveness
  - Non-traditional approach to treatment

(Haines-Saah, Kelly, Oliffe, & Bottorff, 2015; Ramo, Meacham, Kaur, Corpuz, Prochaska, Satre, 2019)
Best Practices in Social Media Interventions for Addiction

- Determine if social media intervention is needed
- Engage the target audience
- Determine if stand-alone or adjunct intervention is best
- Clearly determine the role and comfort level of all stakeholders
- Seek feedback throughout the process
- Consider intervention costs
- Privacy and confidentiality
- Ethical considerations

OTHER THOUGHTS?

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Let's connect!

Thank you
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References


