Engaging Native American Communities in the Development and Analyses of Culturally-Relevant Substance Use Interventions

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Academic Story

• Went back to school at 25, just before 26th birthday, Jan. 1992.

• Went to 2 junior colleges in southern California, 1992-1995

• Transferred to Berry College in Rome, GA (B.S. Biochemistry, 1997)

• Western University of Health Sciences (D.O., 2001)

• Loma Linda University Medical School (Psychiatry Residency, 2001-2005)

• Yale University (Addiction Psychiatry fellowship and research training, 2005-2007)

• A.T. Still University (M.P.H., 2008)
Early Research Career Thoughts

• Team up with a well-known mentor if possible.
• Can have a non-Native research mentor.
• Post-doc training is generally recommended.
• Look for AI/AN research mentorship programs nationwide.
• Do secondary analyses early on to publish articles.
• Grant writing training and workshops.
• Apply for NIH R-03 or R-21 grants to start.
My journey in working with AI/AN communities

• Obtaining Community Input
  - Los Angeles County Department of Mental Health
  - Health Learning Collaborative and California Reducing Disparities Project (CRDP)
  - Secondary analyses report in Los Angeles County

• Designing an Intervention utilizing Community Input

• Recruitment/retention of research participants

• Publishing Data
AI/ANs and substance use: rates

- Alcohol and other drug (AOD) use among American Indians and Alaska Natives (AI/ANs) is a significant health issue in the United States.

- In 2013, AI/ANs had the highest rate of AOD dependence and abuse compared with other racial groups.

- A shortage of data exists with regard to urban AI/AN substance use rates.
AI/ANs and substance use: rates

• From 2004 to 2008 from the Substance Abuse and Mental Health Services Administration (SAMHSA) National Survey on Drug Use and Health (NSDUH) showed that rates of past-month heavy alcohol and illicit drug use for adults were higher among AI/ANs than U.S. national averages (30.6% vs. 24.5% and 11.2% vs. 7.9%, respectively).

• Based on data from 2003 to 2011, AI/ANs were more likely than individuals from other racial/ethnic groups to have needed AOD treatment in the past year.
AI/AN youth and substance use

- According to the largest national-based study to date, AI/AN youth have the highest rates of alcohol and other drug (AOD) use compared to any other racial/ethnic group in the U.S.

- National data further show that AI/ANs report higher rates of AOD use, greater frequency and intensity of AOD use, earlier first AOD use, and much higher alcohol-related mortality than other racial/ethnic groups.

- At-risk AI/ANs adults in an urban setting reported a significantly earlier onset of alcohol, marijuana, methamphetamine, and other drug use compared to all other ethnic/racial groups within LA County (Dickerson et al., 2012).
Urban AI/ANs

- Approximately 70% of AI/ANs reside in urban areas (US Census, 2010).
- Evidence-based alcohol and drug prevention programs specifically developed for urban AI/AN youth are limited.
- Los Angeles County has over 150 tribal nations represented.
- A wide variety of AI/ANs exist with regard to acculturation, tribal affiliation, and level of cultural identity.
- A diminished sense of “community” and broader recognition are barriers to providing culturally-relevant services.
Need for community-based approaches

- Community-based approaches to AOD prevention and intervention that focus on partnerships and collaboration may be especially helpful for AI/AN youth.

- A literature review of aboriginal community-based AOD programs from 1975–2007 found that successful programs had strong community interest and engagement, leadership, and sustainability, and integrated AOD prevention and treatment into existing community programs (Jiwa, 2008).

- Within the AI/AN urban community, AI/AN youth have very few opportunities to engage in healthy, AI/AN traditional and cultural activities which were very important in sustaining healthy communities prior to European and Russian contact.
Community-based suggestions for cultural-based interventions

- In a state-wide study conducted Native American Health Center [NAHC] aimed to provide CA state policy makers with information on culturally relevant mental health matters, the importance of integrating traditional healing and cultural practices into mental health and substance abuse treatments services for AI/AN emerged as a significant priority (NAHC, 2012).

- Using focus groups and community forums with youth, parents, and providers, Dickerson and colleagues demonstrated the need for culturally-appropriate interventions for Los Angeles County AI/AN youth (Dickerson et al., 2012).

- In a sample of 150 AI/AN adults at an urban Indian Health Service (IHS) clinic in Milwaukee, Wisconsin, 38.0% of the patients see an AI/AN healer, and of those who do not, 86.0% would consider seeing one in the future (Marbella et al., 1998).
Integrating an Evidenced-based treatment (EBT) with cultural activities

• Integrating MI and AI/AN traditional activities could lead to an innovative, developmentally and culturally relevant program for urban AI/AN youth.

• Through a current NIAAA/NIDA-funded study, Motivational Interviewing and Culture for Urban Native American Youth (MICUNAY) seeks to address the need for a substance use prevention program for urban AI/AN youth.
Motivational Interviewing

• “Motivational Interviewing is a person-centered, directive method of communication for enhancing intrinsic motivation to change by exploring and resolving ambivalence.”

• The “spirit of MI” encompasses collaboration, acceptance, compassion, evocation, autonomy.”
Why use MI with adolescents?

• Developmentally appropriate
• Helps teens feel comfortable
• Adolescents are always being told what to do and are being judged—MI lets them take the driver’s seat
• Gives teens a chance to think and act independently
Common human reactions to being listened to

- Understood
- Want to talk more
- Liking the counselor
- Open
- Accepted
- Respected
- Engaged
- Able to change

- Safe
- Empowered
- Hopeful
- Comfortable
- Interested
- Want to come back
- Cooperative
MI and AI/ANs

- MI honors the wisdom within the client rather than forcing provider’s wisdom on client
- Client is seen as a person rather than a problem
- “We have to honor the wisdom in the client and then be able to see that person in the community, that’s a grandmother or grandfather, honoring them for who they are”

-- Navajo female participant

Venner, Kamilla (2014)
MICUNAY Conceptual Model

Workshop 1
Making Healthy Choices for My Brain
- Behavior focus
  - How do alcohol and drug use affect my brain?
  - Beading workshop

Workshop 2
Making Healthy Choices for My Body
- Physical focus
  - The path of choices
  - Learning about and eating Native American foods

Workshop 3
Making Healthy Choices for My Spirit
- Spiritual focus
  - Thinking about my future
  - Prayer and sage ceremony
Workshop format

• Each of the 3 workshops are 2 hours in length.
• Opening prayer (smudging), ground rules, confidentiality, agenda reviewed first.
• 1-hour group MI session followed by 1-hour cultural activity. (except for workshop 1 where the beading activity is started first to allow for more beading time).
• Workshops interactive, education-focused, and introductory in nature.
Workshop 1

• Begins with beading activity. Actual beading activity dependent on the cultural teacher and local AI/AN traditions.
• Introduction to the Medicine Wheel.
• Alcohol and drugs and the brain-overview
• How alcohol and drugs affect the brain.
• Memory game.
• Handouts and links to cultural activities.
Workshop 2

- Pros and cons of alcohol and drug use.
- The path of choices
- Rulers
- Wrap up for MI
- Review of Medicine Wheel
- Cultural activity: discussion and demonstration of AI/AN foods and cooking.
Workshop 3

- What can happen when people use alcohol and drugs.
- Thinking ahead.
- Wheel of the future.
- Wrap up for MI
- Review of the Medicine Wheel
- Cultural activity: Sage and smudging.
THE PATH OF CHOICES

EXPERIMENTAL USE

35% of teens have used alcohol recently
20% have used marijuana recently

21% of teens have been drunk in the past month
5% use marijuana daily

NEVER AT ALL

38% of teens have never tried alcohol!
61% have never tried marijuana!

All percentages are averages of 11th and 12th graders
MICUNAY Aims

• **Aim 1.** Conduct focus groups and brief surveys with urban AI/AN communities to design MICUNAY, a substance use prevention program for AI/AN youth that integrates MI and AI/AN traditional activities

• **Aim 2.** Compare AI/AN youth who receive only Community Wellness Gathering (CWG) (n=100) to AI/AN youth who receive the CWG plus MICUNAY (n=100) across urban areas in California. Compare outcomes at 3- and 6-month follow-ups
CAB MIGUNAK 2 Nov 13

Challenges / Problems

Substances
Marijuana - recent change
- perception of safety
- comparison to crack / heroin,
  Ectasy, both salts, etc.

Rituals / trad. activities
- 'Know not to use
- Sun, Dancer & Pressure around year
- Special status
- Peer pressure, not to use
- If not connected, pressure to use

How compact -
- Family events
- Bay Area orgs
- Parenting groups, classes
- Beet, Sewing events

Barter = not looking. Notice enough

Plenty of good at needs

Kids & adolescents
- special needs (child 7)
- Cultural activities not always
  peaceful old age
- Max intact of cultural identity
- Attachment
Analysis: Structured Coding in Dedoose
Challenges Urban AI/AN Youth Face

- Violence and harassment
- Linked to services
- Difficult being mixed
- Tribally specific
- Family relationships

Reasons to use Substance use

- Peer pressure
- Effects of substance use
- Stereotypes: Dislike Native Identity
- Urban creates disconnection
- Native identity important
- Popular culture is negative

Cultural identity

Challenges
Focus Group Questions

- Drug and alcohol use among urban youth
- Cultural identity questions:
  - What does AI/AN tradition mean to you?
  - How connected do you feel to AI/AN identity and traditions?
  - How do your AI/AN friends feel about AI/AN identity?
  - How do AI/AN youth feel about AI/AN identity and traditions?
- Feedback on MI materials and cultural activities
Traditional Practices Chosen

• 3 traditional practices chosen for MICUNAY
  – Bead making
  – Cooking
  – Prayer and sage ceremony

• The final 3 were chosen due to high interest levels and feasibility issues

• Many other cultural activities were also mentioned by AI/AN urban youth
  – Pow-wows/drumming/music
  – Making clothing/regalia
  – Hunting and fishing
  – Learning about AI/AN ways of life (especially the practices of warriors)
  – Learning Native language
  – Prayer/blessing
  – Basket-weaving
  – Shimmy (hand game)
MI Components

• Group liked open and collaborative nature of MI
  – Youth: “Kind of make it [the program] like their own-kind of share their thoughts about different things...so you feel kind of connected.”
  – Parent: “I think it’s a much more open invitation for people to participate as opposed to like telling them what to do... so like more of an open discussion about cultural identity, about struggles, objectives...again, like putting it back on the kids.”
MI Components

• Groups liked focus on choice; making choice culturally relevant

  – CAB member: Share with youth: “This is the Black Road [the bad way, the road of misfortune] and these are some things that are going to happen if you walk down this road. But then here’s the Red Road-these are the traditional way of living traditional way of thinking, and when you follow this road, these are the things that are going to happen... So that Red Road is a concept of our culture and our way of life, so maybe sharing that, teaching with them.”
Two articles have been published thus far for MICUNAY


• Dickerson DL, Brown RA, Johnson CL, Schweigman K, D'Amico EJ. Integrating motivational interviewing and traditional healing to address alcohol and drug use among urban American Indian/Alaska Native youth. Journal of Substance Abuse Treatment 2015; Jul 29. [Epub ahead of print]
Conclusions and Next Steps

• MICUNAY represents a community-informed, integrated approach developed for urban AI/AN youth

• Field data suggest high youth enthusiasm for program incorporating AI/AN themes and practices

• Will have just completed a randomized controlled clinical trial to assess benefits of MICUNAY with 183 urban AI/AN youth across California.

• Will are examining changes in alcohol and drug use, cultural identity, spirituality, physical and mental health indices over 6 months post-intervention
American Indians/Alaska Natives and Drumming

• The drum is a sacred instrument among AI/AN tribes.

• The drumbeat symbolizes the heartbeat of indigenous nations and the heartbeat of Mother Earth.

• The drum is used in sacred ceremonies, social dances, feasts, in preparation for hunting.

• Drumming was and is still used to help heal the sick and as a way of carrying songs and prayers.

• A way of bringing AI/AN communities together.
Drumming and AI/AN

• May offer a connection with the spirit world, ancestors, and culture and identity.

• Certain types of beats are said to carry special healing powers into the human body.

• A sick person’s psychological and physiological states are believed to be altered by the rhythmic drumbeats and accompanying song.
Several studies have demonstrated physical and psychological effects associated with drumming (Winkelman, 2003).

Drumming may also have biological effects that may mitigate various behaviors.

Rhythmic auditory stimuli (including drumming, singing, and chanting) may generate auditory drive leading to increased alpha and theta wave production, which may contribute to a desired meditative state (Wright, 1991).

This response is produced by activation of the limbic brain's serotonergic circuits to the lower brain that synchronize the frontal areas of the brain with ascending discharges.

Integration of nonverbal information from lower brain structures to frontal lobe regions has the ability to enhance insight.
"The drum connected me with something I hadn't known before, and I felt a huge lump in my throat that was equal parts sorrow, gratitude and joy. When I was coaxed out for my first inter-tribal dance, I closed my eyes and felt the drum and began to move my feet. It was magic. I could dance. It would be a few years before I was graced with the drum teachings of my people, but there was a spiritual connection nonetheless. Once I felt the drum in my chest, the hollowness I'd carried as a displaced Indian kid was gone. In its place was belonging."

Questions relating to drumming and AI/ANs

• Can the use of the drum be used in a culturally-appropriate manner for substance abuse tx?

• How important culturally is it to accompany singing with drumming?

• Roles of AI/AN females in drumming?

• Approaching diversity of AI/AN drumming traditions (562+ federally-recognized tribes)
Women and drums

• In many tribes, drumming is not the role traditionally prescribed for women. For example, men usually are seated in a circle around a drum, while women stand around or outside of the circle singing and/or dancing.

• “Culture always changes. It’s controversial, and it’s something I think is pretty interesting,” Amber Annis, president of UND’s Indian Studies Association.

• “We don’t compete against our men; we are equals with our men,” she said. “This drum is about women healing.” Jermaine Tremmel, Red Drum Women Society Singers. (Indian County News, 2008)

• Some cultural leaders have concerns with further dilution of AI/AN cultures by offering women the opportunity to drum where men typically drum (i.e. pow-wows)

• In various tribes, women drum and sing solo, i.e., healing songs.
Drum-Assisted Recovery Therapy for Native Americans (DARTNA) Treatment Program

- Two versions: 6 and 12 week versions

3-hour session format

60 minutes: Education/cultural discussion: drumming, teaching of songs, Medicine Wheel, 12-steps, White Bison concepts

90 minutes: Drumming activities corresponding to Medicine Wheel concepts

30 minutes: Talking Circle/Processing Group

- Each week focusing sequentially on the 12-steps of AA/NA and concepts of the Medicine Wheel
WEEKS 7-9
STEPS 7-9 OF AA/NA

WEEKS 10-12
STEPS 10-12 OF AA/NA

WEEKS 1-3
STEPS 1-3 OF AA/NA

WEEKS 4-6
STEPS 4-6 OF AA/NA
First DARTNA Grant Overview

First grant funded by National Institutes of Health/National Center for Complementary and Alternative Medicine (NIH/NCCAM), (2010-2013)

1) Conducted series of focus groups (treatment providers, AI/AN patients, CAB) to discuss initial treatment format

2) Completed preliminary DARTNA treatment manual.

3) Pretest of DARTNA among 10 AI/ANs

Follow-up focus group to finalize protocol and to prepare for subsequent large clinical trial.
DARTNA focus group overarching conceptual themes

• (1) drumming can be especially beneficial for AI/ANs with substance abuse issues
• (2) assuring a culturally-based focus is necessary as it relates to drumming for AI/ANs with substance abuse issues
• (3) providing a treatment format which will provide a foundation of cultural ideals which cross the landscape of diverse tribes while recognizing tribal diversity is necessary
• (4) addressing gender roles as it relates to drumming activities must be addressed within the treatment setting.
Focus Group Quotes

“…So by being more connected to the culture is really going to help them whether they’ve drummed before or whether they’ve ever had any knowledge about their tribal culture. I think it’s their first step that will really help.”

(CAB member)

“People understand that it (education) has to be covered before they start making those drums and singing. If there’s no foundation, there’s no building.”

(Substance Abuse Provider)
Focus Group Quotes

• “...if you’re going to integrate our culture and the drum into this, it needs to be done in a proper way—in the way it was intended to be. Because that healing power is there in the drum and the songs if we use it in the right way...”

  (CAB member)

• “The urban Indians are really Natives not learned in their cultures and where they are...Urban Indians need teachings also as well as the people from the reservation.” (AI/AN patient)
Pretest of DARTNA and Follow-up focus groups

- 10 AI/ANs with current substance use disorders (5 males, 5 females) will be provided the preliminary treatment protocol.

- Follow-up focus groups among participants, providers and CAB will be conducted to aid in the development of the final treatment protocol.
Assessments for Pretest

- American Indian/Alaska Native Cultural Identity Scale
- Functional Assessment of Chronic Illness Therapy (FACIT)-Spiritual Questions Only-Expanded
- Functional Assessment of Chronic Illness Therapy (FACIT)-Fatigue
- Functional Assessment of Cancer Therapy-Cognitive Function (FACT-C)
- The General Alcoholics Anonymous Tools of Recovery (GAATOR 2.1)
- The Brief Symptom Inventory
- The Addiction Severity Index (ASI)
DARTNA pretest participants

- The age range was 19-67 years of age.
- Six participants were male and 5 were female.
- Education level ranged from 10th grade to Masters Degree.
- Nine participants reported alcohol as being their drug of choice and 2 participants reported marijuana as their drug of choice. With regard to marital status, six were divorced, four were single, and one was married.
- With regard to employment, seven were employed (either full time or part time), three were unemployed, and one was on disability.
Preliminary Pretest Findings

• Promising results suggest benefits of drumming in the following areas:

- significantly improved psychiatric status
- significantly improved medical status
- significantly increased functioning levels
- significantly enhanced spirituality
Feedback from participants after participating in DARTNA

• “I’m grateful it’s my time to reconnect with the cultural, traditional way of life to find out who I really am and where I come from.”

• “With constant distraction in my path, drumming is a way to look up from stress, take care of things, get them out of the way.”
Participant feedback continued:

• “I feel serenity, peace…”
• “It’s uplifting and the drum itself is spiritual. I never thought of doing drugs or drinking.” “(I) start to feel spiritual connection. This is where I need to be, where I should be. I feel at home…”
DARTNA publications to date


Conclusions

• Work conducted in this study highlights a process of conceptualizing and developing traditional-based treatments for AI/ANs with substance use disorders.

• Drumming may be useful for AI/ANs with substance use disorders.

• Strategies to conduct successful clinical trials among AI/ANs need to be established.

• Further research investigating traditional-based healing strategies are needed.
New grant funded for 2nd DARTNA Study

- Grant funded by NIH/National Institute on Alcohol Abuse and Alcoholism (NIAAA) 2016-2019,
- Principal Investigator: Dan Dickerson
- Research site: United American Indian Involvement, Inc.
- Feasibility clinical trial began June 2017 for AI/AN men and women, 18 years of age and older with histories of substance use disorders.
- Will are utilizing a community-based approach to recruiting/retaining participants
Contact Info

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