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Traditions and Connections for Urban Native Americans (TACUNA): Utilizing community-based input to develop an opioid prevention intervention for urban American Indian/Alaska Native emerging adults

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Abstract

Introduction: Although approximately 70% of American Indian/Alaska Native (AI/AN) people reside in urban areas, very few opioid prevention interventions exist for urban AI/AN emerging adults. The study team conducted this study to develop Traditions and Connections for Urban Native Americans (TACUNA), a new opioid prevention intervention for urban AI/AN emerging adults ages 18–25. TACUNA comprises three 2-hour virtual workshops.

Methods: We conducted thirteen focus groups in three urban communities in northern, central, and southern California (six with urban AI/AN emerging adults ages 18–25 [n = 32], four with parents [n = 26], and three with providers [n = 33]) to identify relevant intervention domains. We then incorporated the results of a rapid analysis of the focus groups to develop intervention workshops followed by a pilot test (n = 15) to further refine the intervention and assess feasibility.

Results: Four major domains emerged from focus groups: 1) historical trauma/cultural identity, 2) AI/AN traditional practices, 3) social networks, and 4) substance use. We incorporated all feedback relating to each theme to enhance content of the TACUNA intervention. Pilot test participants felt that TACUNA content was interesting, addressed their issues and concerns as urban AI/AN emerging adults, and believed that the program could help them to establish cultural and social connections to live healthier lives.

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Conclusions: Research activities demonstrate how a community-informed and culturally grounded opioid prevention intervention can be developed for urban AI/AN emerging adults. Addressing issues and challenges with culturally and developmentally relevant intervention content can help to build resilience and hopefully decrease opioid use among this underserved population.

1. Introduction

The opioid epidemic has had profound effects on the health and well-being of American Indian and Alaska Native (AI/AN) people (Centers for Disease Control and Prevention (CDC) & National Center for Health Statistics, 2020; Wilson et al., 2020). According to the most recent Centers for Disease Control and Prevention (CDC) data, AI/AN populations had the second highest overdose rates from all opioids in 2017 (15.7 deaths/100,000 population) (Centers for Disease Control and Prevention (CDC) & National Center for Health Statistics, 2020). Another recent study found that the overdose death rate among urban dwelling AI/AN individuals was 1.4 times higher than those living in rural areas (Joshi, Weiser, & Warren-Mears, 2018). Among the general U.S. population, the potential for progression to opioid dependence among emerging adults who use prescription opioids is substantial (Marshall, Green, Yedinak, & Hadland, 2016; McCabe, West, Morales, Cranford, & Boyd, 2007), as well as transitioning to heroin use and/or injection drug use (Marshall et al., 2016). Given that approximately 70% of AI/AN people reside in urban areas (U.S. Census Bureau, 2010), culturally responsive opioid prevention programs are crucial for urban AI/AN emerging adults.

To date, very few evidence-based and culturally grounded opioid prevention interventions exist for urban AI/AN emerging adults. Focus groups conducted with AI/AN community members and providers in California highlight the need for opioid use prevention programming that incorporates AI/AN traditional practices (Soto, West, Unger, et al., 2019). Furthermore, work in this area emphasizes the importance of integrating AI/AN traditional practices into substance use prevention and treatment interventions (Dickerson et al., 2018; Jernigan, D'Amico, Duran, & Buchwald, 2020). In our prior intervention program, (Motivational Interviewing and Culture for Urban Native American Youth [MICUNAY]), we integrated traditional practices with motivational interviewing (MI) to address substance use among urban AI/AN adolescents (D'Amico et al., 2020; Dickerson, Brown, Johnson, Schweigman, & D'Amico, 2016). The study team chose MI due to its acceptability and proven utility among AI/AN people (Venner et al., 2008; Dickerson et al., 2016). Results for MICUNAY indicated that urban AI/AN adolescents found the program enjoyable, and that integration of traditional practices and evidence-based practices during this critical period of development helped to promote resilience (D'Amico et al., 2020). Developing a similar intervention that incorporates traditional practices into an opioid prevention intervention for urban AI/AN emerging adults may also help to decrease opioid use among this population.

Emerging adulthood is a key developmental stage for AI/AN urban youth, as issues associated with cultural identity may be challenging during this time (Brown et al., 2021). For example, fewer opportunities to participate in AI/AN traditional practices (e.g., drumming, storytelling) in urban areas (Dickerson et al., 2016; Weaver, 2012) may

complicate one's AI/AN cultural identity and connectedness to AI/AN community wellness. Additionally, social support is critical to healthy development during the transition to adulthood (Hassrick, Sosnowy, Holmes, Walton, & Shattuck, 2020; Lazard, Saffer, Horrell, Benedict, & Love, 2020; Lee & Goldstein, 2016). However, harnessing community-based healthy supports and social networks may be especially challenging for AI/AN emerging adults living in urban areas (Johnson, Begay, & Dickerson, 2021). Thus, research should help to develop opioid use prevention interventions that seek to increase support and address challenges with community and cultural connection faced by urban AI/AN emerging adults to help decrease the effects of the opioid epidemic among the AI/AN population overall.

This study focuses on the creation of an opioid prevention intervention that resonated with urban AI/AN emerging adults, Traditions and Connections for Urban Native Americans (TACUNA) curriculum (D'Amico et al., 2021). We adapted workshop content for TACUNA from our prior work (Dickerson et al., 2016). TACUNA integrates MI with traditional practices and helps to build healthy social networks (see Fig. 1). This paper describes the process of developing and tailoring TACUNA based on 13 focus groups conducted across California with AI/AN emerging adults, parents, and providers to understand challenges and potential supports in urban communities, and feedback generated from a pilot test of the TACUNA workshops.

2.   Methods

2.1.   Research design overview

This study uses qualitative data gathered from Phase 1 of a study to develop and tailor TACUNA (UG3DA050235). We conducted focus groups among urban AI/AN emerging adults, parents, and providers in northern, central, and southern California to identify relevant intervention domains for urban AI/AN emerging adults. To develop the intervention manual, we conducted a rapid analysis (Vindrola-Padros & Johnson, 2020) to map emerging themes onto intervention domains. Subsequently, we pilot tested our program with three separate groups of urban AI/AN emerging adults. RAND's Institutional Review Board and our Elder Advisory Board approved all procedures. We utilized a community-based participatory approach to ensure that research procedures were culturally appropriate and ethically conducted (Fisher & Ball, 2003; Larson, Schlundt, Patel, Goldzweig, & Hargreaves, 2009; Minkler & Wallerstein, 2003).

2.2.   Sample and recruitment for focus groups and pilot test

We conducted thirteen focus groups with 91 participants (six with urban AI/AN emerging adults ages 18–25 [n = 32], four with parents [n = 26] of emerging adults, and three with providers [n = 33]). Our prior qualitative work with this population (Brown, Dickerson, & D'Amico, 2016; Dickerson et al., 2016) indicated that this number of focus groups and this distribution of types of participants would be sufficient for thematic and meaning saturation. We used a nonprobability (convenience) sampling approach, with participants recruited through advertisements at community events and community partner sites with the help of AI/AN recruiters throughout southern, central, and northern California. We also worked with our community partner, Sacred Path Indigenous Wellness Center (SPIWC), to ensure

that recruitment and engagement for the project was conducted in a community-focused and culturally sensitive manner. Focus groups occurred in person between November 2019 and February 2020 (immediately prior to the COVID-19 pandemic). Inclusion criteria for urban AI/AN emerging adults (ages 18–25) included self-identifying as AI/AN. We did not assess susceptibility to opioid, alcohol, and other drug use as TACUNA is focused on both prevention and intervention. Parents were required to have a child who identified as AI/AN and was an emerging adult. Self-identification as AI/AN was not required for providers. The study offered focus group participants $50 gift cards as remuneration for the two-hour session.

For the pilot test of the intervention, 15 urban AI/AN emerging adults participated in three different TACUNA workshops and a live feedback session at the end of the workshop. The pilot test recruited participants with fliers posted at service provider locations and through social medial platforms. The study team conducted the pilot test between July and August 2020 during the COVID-19 pandemic, and therefore we provided workshops virtually. Pilot test workshop participants received $100 gift cards for each three-hour session that they attended.

2.3. Development of the intervention

2.3.1. Focus group and pilot data collection—The purpose of the focus groups was to identity information relevant to opioid prevention among urban AI/AN emerging adults. At least two members of our research team moderated focus groups, which were recorded and transcribed. All research members were trained in qualitative research methods and had experience working with adolescents, vulnerable populations, and AI/AN emerging adults. The research team members discussed five main domains in the focus groups, based on input received from our AI/AN Elder Advisory Board and the goals and aims of this study: (1) social relationships; (2) AI/AN identity; (3) opioid use (including nonmedical use of prescription opioids and heroin use), alcohol, cannabis, and other drug use; (4) TACUNA intervention content; and (5) study recruitment and retention. Finally, participants viewed five proposed logos to obtain their votes on a logo that would represent the TACUNA program and opioid prevention for urban AI/AN emerging adults.

The objective of the three pilot workshops was to evaluate feasibility and acceptability of draft intervention content. Each workshop lasted approximately 2 h, and focused on healthy decision-making for the body, the mind, and the spirit (respectively). One activity common to all three workshops was individualized visualization of participants' social networks, which formed the basis of group discussions around how to nurture healthy relationships across immediate and extended communal families. Each workshop was followed by a half-hour to 45-minute structured feedback session, where participants provided feedback on content, handouts, and activities, and made suggestions for improvement. Workshops and the feedback session were recorded and transcribed.

2.3.2. Rapid analysis—We conducted a rapid analysis (Given, 2008) of focus group notes to identify salient domains for the intervention. The team selected this approach to guide the identification of new intervention components for the final development of

TACUNA, and involved team discussions based on detailed notes taken during the focus groups. This process also fit the need of our research by providing actionable results while ensuring scientific rigor within a short timeframe. Because the workshop development process was primarily an adaptation of a previous intervention that we developed for AI/AN youth (MICUNAY) that also uses MI and AI/AN traditional practices (Dickerson et al., 2016), we structured our rapid analysis around pre-existing segments of the prior intervention. However, we included an additional category (social networks), as this topic was part of the TACUNA protocol. Next, we mapped themes emerging from the rapid analysis onto intervention domains, using our findings to recommend how intervention content could be adapted for this new audience. We also used the rapid analysis findings to identify new intervention components warranted by the needs of this specific audience. Next, the team concurred on final intervention content. Finally, we used workshop notes to identify views on the utility and feasibility of the TACUNA intervention, as well as recommendations for modification of the content. We do not include guideline checklists that are specific to rapid analysis since, to our knowledge, they are not available.

3. Results

3.1. Sample

Table 1 presents a summary of participant demographics for the focus groups. Emerging AI/AN adults were ages 18–25 years, with an average age of 21.5 years. The average age of parents and providers were 46.5 years and 48.9 years (respectively). Most participants were female. Most parents and providers were AI/AN or AI/AN plus another race. Over 50 tribes were represented among participants. We do not provide data regarding tribal affiliation to protect tribal confidentiality (Norton & Manson, 1996).

3.2. Focus group themes

We used rapid analysis to identify new intervention components warranted by the needs of urban AI/AN emerging adults. Four major thematic domains relating to opioid prevention for this group emerged: 1) historical trauma/cultural identity, 2) AI/AN traditional practices, 3) social networks, and 4) substance use. The team used focus group data to map content into the TACUNA manual, which was then pilot tested. As a result of our rapid analysis qualitative methodology, we arrived at findings that were distinct from MICUNAY by determining thematic domains that related to a new audience of urban AI/AN emerging adults.

3.3. Historical trauma/cultural identity

Overall, emerging adults, parents, and providers highlighted the importance of addressing historical trauma as a root cause of numerous challenges experienced by AI/AN people in the TACUNA workshops. Focus group participants also discussed that the relocation of AI/AN people to urban areas contributed to urban AI/AN individuals having less knowledge of their culture and participating less in traditional practices. For example, one urban AI/AN emerging adult participant stated:

> … definitely speak about the effects of colonialism, historically what happened to
> not just the people of this region, but the people nationally. The reason why we
> have so many different tribes here (in urban areas) is because of the Relocation
> Act. I think address that topic; it would broaden their perspective of why they may
> not be able to speak their language as much as so-and-so, or why they dont' even
> know some of their traditions or some of their traditional clothing. I think definitely
> it's a rough history to speak about…but I think this certain age group is able to
> understand that it's not our fault.

Focus group participants also commented about the importance of addressing cultural
identity. They reported experiencing discomfort with their AI/AN identity due to being
ridiculed and feeling intimidated for being AI/AN within urban areas. This feedback
highlighted the importance of including content within TACUNA that can help urban AI/AN
emerging adults enhance cultural identity and pride during this key developmental period.
For example, one parent stated,

> Just him knowing that he's the only, probably him and another kid are Native there;
> that he doesnt' want people to know. He doesnt' want anybody to know because…
> they'll mess with him, just for knowing…He's already been hearing it. He knows
> that a couple people know in his classroom and yet he still hears it. Like, when
> there's a Native film on in November – why they do this in high school, but they
> do – they show a film and some kids up there were already making the whooping
> sound and all of that, and he had to sit there through it.

3.4. AI/AN traditional practices

Similar to our work with urban AI/AN adolescents (Dickerson et al., 2016), urban AI/AN
emerging adults expressed interest in participating in a wide variety of AI/AN traditional
practices, validating the importance of providing an opportunity for this population to
learn more about their culture and connect with their AI/AN community. AI/AN emerging
adults indicated interest in participating in drumming, sweat lodge ceremonies, dancing,
cooking, beading, basket weaving, hand games, singing, hunting, storytelling, and regalia
making. Suggestions for outdoor activities included gatherings, camping, river rafting,
hiking, scavenger hunt, horseback riding, and nature exploration.

Although urban AI/AN emerging adults expressed interest in participating in traditional
practices, they also reported numerous barriers due to the urban setting. Participants said
that participation often required financial means to travel to attend AI/AN traditional events
within or outside urban areas. Some traditional events, for instance, required 2–3-hour drives
and lodging costs. For example, one emerging adult participant stated, "Yeah, it's a lot
harder to find your traditional lifestyle in a city unless you have like a vehicle to travel or
this place." This statement showed the need for delivering TACUNA in a way that can reach
people in a cost-effective manner that is convenient for participants.

3.5. Social connections

Across focus groups, emerging adults, parents, and providers emphasized social connections
in the health and well-being of urban AI/AN emerging adults. When shown examples of

fictional personalized social networks that would be provided to TACUNA participants, urban AI/AN emerging adults believed that this would be interesting and help them think more deeply about their own specific network interactions. Urban AI/AN emerging adults reported unique and important connections that they experience when Native people are socially involved. For example, one urban AI/AN emerging adult stated,

> I feel like it's a pretty easy system to understand, especially when it's laid out side-by-side. I think the one thing I would maybe want to know about these people is who they are in relation to each other, like if they're family or if they're just friends or if they're cousins. Those kinds of things that in real life do matter as far as those relationships go. But, otherwise, I feel like it's like really clear… And a good way of kind of thinking through those things.

Also, participants said that understanding one's own social networks could help people to navigate a sober and healthy life. For example, one urban AI/AN emerging adult stated, "If it was drawn out for each person and they were serious about becoming sober, or improving their life, I guess it can be a guide." Overall, focus group data indicated that addressing social connections in the TACUNA program for this age group is crucial.

3.6. Substance use

Particpants expressed a need to discuss opioid use within AI/AN communities. For example, one urban AI/AN emerging adult stated, "Opioids are rarely discussed to begin with. Every time people talk about drugs it's either alcohol, weed, or meth. It's never been focused on opioids."

Emerging adult participants said that education needed to be easy to understand and engaging. For example, one urban AI/AN emerging adult said we needed to find "cool ways" to educate this population.

> We're reading a book called Brainstorm by Dr. Siegel. It's things you grow up with you never thought of. Not using big words that dont' make sense, it cuts it down. It talks about adolescents, 13–24, so he talks about how your brain is growing and changes between those years and the way you react…

Many of the emerging adults, parents, and providers discussed how substance use could be a maladaptive coping strategy for dealing with emotions. For example, one provider stated, "Yeah, it's all about learning how to deal with your emotions. I mean, that's why people go out and use. They dont' want to feel that stuff."

3.7. Logo development

We contracted with an AI artist, Robert Young (Pueblo of Acoma), from Los Angeles who prepared five project logos. The study team put these logos onto voting sheets that were handed out at the focus groups and throughout the three urban communities in northern, central, and southern CA. Votes were tallied, and the final chosen logo consisted of an urban landscape with teepees in the foreground (Fig. 2).

3.8. Manual development

We used feedback from focus groups to create culturally and developmentally appropriate content and activities for the TACUNA manual that we then pilot tested. In the following paragraphs, we show how we incorporated feedback to enhance our topics of historical trauma/cultural identity, traditional practices, social connections, and substance use for urban AI/AN emerging adults.

Given the emphasis on learning more about historical trauma and its effect on cultural identity and pride, we included educational information about traditional trauma in addition to providing participants the opportunity to discuss their thoughts about this topic. We also included videos showing how urban AI/AN people are overcoming the effects of historical trauma through resilience, a strong presence, and cultural pride. Finally, we provided education on the traditional practice of storytelling and discussion of how urban AI/AN emerging adults could tell their own stories regarding their cultural journeys within urban areas. We considered providing a workshop on how to create one's own virtual story, but learned from our community partner that this would not be feasible to complete in a single workshop; thus, we included additional videos showing cultural identity stories of AI/AN emerging adults.

Second, for traditional practices/cultural identity-related topics, in addition to storytelling, we included cooking and a sage ceremony/ prayer. The study team selected these traditional practices based on focus groups data and feasibility of providing traditional practices virtually.

Of note, all workshops moved from in-person to virtual due to COVID-19. Thus, although participants recommended outdoor activities, we were not able to provide traditional practices outdoors due to feasibility issues and restrictions imposed by COVID-19. In addition, the team modified several workshop activities to accommodate virtual participation. For example, instead of an in-person cooking demonstration and activity, we planned to mail cooking ingredients for Three Sisters Stew (dish chosen for cooking) for participants to use at home during the cooking workshop. We also chose three videos of AI/AN chefs preparing both traditional and contemporary dishes that harnessed AI/AN traditions. For our sage ceremony workshop, our community partner, Sacred Path Indigenous Wellness Center, planned to mail sage picked by traditional people in the Los Angeles area.

To help enhance our substance use education and to make it more interesting and engaging, we also mailed colorful and interesting handouts that are easy to understand, have pictures, and describe effects of opioid, alcohol, and other drugs use on the brain. We focused on coping with depression and anxiety and emotional regulation, and the concept of self-medicating. Finally, we included content on potential benefits of traditional practices to decrease stress levels and as a healthy coping strategy for this population.

For the topic of social connections, we retained our original approach of providing social network diagrams showing their overall social networks, social networks based on substance use, and social networks based on traditional practices given feedback from focus groups.

However, the virtual group participation required us to modify our original plan of having participants fill out surveys about their social networks immediately before workshops and receive printouts of diagrams to discuss during the groups. Instead, prior to the workshops, the study team provided participants a link to an on-line survey about their social networks and showed them diagrams immediately after completing the survey. The study provided participants with secure links to the diagrams that they could access during the workshops to prompt discussion.

3.9. Results from pilot test

3.9.1. Sample—Fifteen AI/AN emerging adults ages 18–25 who self-identified as AI/AN participated in the pilot test. We did not collect information on age, gender, or tribal affiliation, although both males and females participated in the pilot test. Three participants attended two of the three sessions and nine participants attended one of the three sessions.

3.9.2. Historical trauma/cultural identity—Pilot test participants indicated that the focus on historical trauma was helpful in thinking about their own cultural journey. For example, in response to a video on Indigenous Peoples Day and Los Angeles video, one participant stated,

> It was nice to see a lot of people that we know (in the video). When all this was happening with the Christopher Columbus Day and the Indigenous Peoples Day, I thought it was, like, amazing, you know… 'cause I feel like, you know, Christopher Columbus was a horrible person, so why are people saying we're erasing history when they've erased so much of our history, you know?

Participants also felt that videos of AI/AN emerging adults discussing their cultural identity resonated with their own experiences and believed that these videos helped to instill pride and a stronger sense of cultural identity. For example, one participant stated,

> I lived in a mostly, like, a white-dominant area, so there's not a lot of brown people around me, so when I was growing up as a little kid, it was a lot of, you know, girls who didnt' look like me. And I remember, like, me and my friend…she'd always tell me, like, she felt the same way that she wanted to be, like, lighter-skinned and, like, blond hair, blue eyes. And, like, looking back, I cant' believe I thought that way, like I would never think that way now. Like, I love the way I look—like, I accepted it, just like the girl in the video did.

3.9.3. Traditional practices—For the cooking workshop, participants enjoyed videos of Native American chefs. They believed the videos offered an opportunity to learn more about this traditional practice and their culture. For example, one participant stated, "I think the Sioux chef one is really good to use. And also going back to talking about the whole cooking bit, I really liked it…." Another said,

> I actually loved it [the food segment], because, yeah, I'm Native, but I dont' really practice traditionally. This is actually the reason why I joined this discussion, so I could learn more about myself in that way. So I just liked cooking and being hands on, because I felt like more connected to my Native side, so I really loved it.

Participants were also quite engaged with the virtual cooking as they were at home in their own kitchens. Many discussed ingredients that they would add to the Three Sisters Stew and talked about their own recipes. One pilot test participant said, "I'm not eating it yet. It's still cooking, because I added meat and like more squash, because my mom walked by. She's like, 'Oh, I want some,' so I had to add like more of everything."

The workshop focused on the sage ceremony also resonated with these urban AI/AN emerging adults, and they talked about the importance of spirituality in their lives. One participant said,

> Yeah, because from my personal experience within spiritual practices, I feel more elevated and connected when it's with my tribal members, when it's in the roundhouse, when we're praying together, when community comes together and it's not just one individual, which is—not saying that I cant' do that by myself, it's just not as easy….

Participants also enjoyed handouts focused on how traditional activities can increase resilience. Many said that it was interesting to learn about the positive benefits of AI/AN traditional practices on the brain. For example, one pilot test participant stated, "To me this is new information. I didnt' know anything about that and I think it's cool that dancing has that kind of (positive) effect on your brain."

One important discussion that evolved centered on traditional practices including the expectation that when people participate in traditional practices, they should be clean and sober. However, participants noted that some may still struggle with substance use outside of these activities. For example, one pilot test participant stated, "I feel like necessarily traditional practices dont' heal everybody or dont' affect some people's sobriety. So I think that's an important thing to bring up that some people are very connected to their communities and they still struggle with their sobriety."

This feedback underscores the importance of educating participants regarding the sacred nature of AI/AN traditional practices and the expectation of being clean and sober when participating in these ceremonies.

3.9.4.   Social connections—Pilot test participants responded positively to discussion of their social network diagrams. They felt that discussing the role of social networks in their lives could help people to better understand how to get support. For example, one pilot test participant stated,

> Well, it's kind of a fun thing, 'cause we dont' normally think about it, so it's kind of fun, I think, to look at and see, "Oh, this is who I'm hanging out with and this is how they all go together." Another pilot test participant stated, "I think maybe discussing, like, the social networks was a really good idea, and that diagrams, like helped visualize how your social network affects you.

They also felt that this discussion helped them to connect with other AI/AN emerging adults and talk about their experiences: One participant said, "I liked having the space to share our stories," and another indicated, "For me, I liked when I heard other people's, like, points of

views, I guess. It's interesting to see, like, the different aspects they have when dealing with, like, whatever situation they're going through."

3.9.5.   Substance use—Overall, participants emphasized that it was important to talk about the effects of substance use and coping. They felt it was appropriate to address substance use and how it affects many aspects of life, including mental health. One emerging adult said, "I think that the discussion brought up very valid points that we have in our community and how we cope with those points and how those points tie in with, like, mental health, how they tie in with our generational trauma, and basically our identity as being Native." Another said, "I dont' think people correlate how for Native people these traumas have affected us, like, through generations because we cant' break these cycles in our families of the mental health, the alcoholism, the poverty, you know? And that's how it was meant to be."

Many also expressed that urban AI/AN emerging adults may be self-medicating to deal with a variety of stressors. One pilot test participant stated,

> When it comes down to self-medicating…with anxiety and depression, I feel that it becomes because it's an escape, probably…It's an escape and it also gives them something to do…I feel like it's a replacement for something bad, but they choose the wrong thing, basically.

3.9.6.   Virtual delivery of TACUNA—Because of the pandemic, our in-person group intervention became virtual (D'Amico et al., 2021). Virtual implementation actually addressed some of the challenges discussed regarding participating in AI/AN traditional practices within the urban setting (e.g., travel). The pilot test offered us an opportunity to see whether virtual implementation was feasible, and how urban AI/AN emerging adults would feel about this format. Participants said that having the program virtually made things easier because it did not cost anything in terms of travel time, or paying for gas, and they could still fully engage in all aspects of the program. All the pilot test participants said they enjoyed the virtual format of the program, with one emerging adult saying,

> I think the virtual for me (preferred), when you're doing workshops like this where it's more educational, it's easier when you're at home because I think I'm the only one that has kids. So I dont' have to be going places to be dropping them off or getting babysitters, so for me, it's easier to do the virtual (format).

Another pilot test participant stated, "I feel like with the home setting, it's also very helpful because people are comfortable in their own settings, so that enables them to be able to talk more and be themselves a little bit more than in an office setting."

Overall, the virtual format was well liked by participants, and they were able to stay engaged in the workshops. They were also able to easily participate in the traditional activities "together" and connect with one another even though it was not in person.

4. Discussion

TACUNA represents a culturally grounded and community-informed response to the opioid epidemic affecting AI/AN people. By gathering community perspectives via focus groups, enhancing our treatment manual by incorporating this feedback, and pilot testing our intervention, we were able to create a culturally centered opioid use prevention intervention that resonates with urban AI/AN emerging adults. Furthermore, the research processes that this study used can inform implementation policies to address the gap in the delivery of new and promising culturally grounded prevention interventions for urban AI/AN communities. Finally, by addressing concerns and issues that are important to urban AI/AN emerging adults, we were able to create a program that capitalizes on the inherent strengths of AI/AN culture and traditional practices focused on wellness and making healthy choices.

Overall, findings highlight the important roles of resilience and cultural pride in the prevention of opioid use among urban AI/AN emerging adults. Many participants discussed the profound effects of historical trauma on AI/AN people residing in urban areas and the need for addressing this topic in opioid use prevention programs for this population. Utilizing this feedback, we added videos about storytelling and the effects of historical trauma and ways AI/AN emerging adults are reclaiming their presence in their communities. These videos elicited strong responses from urban AI/AN emerging adults and led to discussions about pride in their AI/AN heritage and how they can find ways to learn more about their culture and traditional practices. Participants enjoyed the cooking workshop focused on making Three Sisters Stew, as it provided a way to share and connect with their culture with other emerging adults. Participants also enjoyed the sage ceremony workshop and felt that this helped to enhance their spirituality and connections with other AI/AN people. The focus group and pilot test provided strong evidence of the importance of focusing on resilience and integrating traditional practices into prevention and intervention programming.

Findings also highlighted that discussing social networks was new and interesting to participants. The diagrams provided a way for these emerging adults to see who in their networks might affect choices they make around substance use and traditional practices, and how they could find support and connect with their community. By offering them the opportunity to visualize and discuss their own social networks, they were able to recognize the role of positive social relationships, which helped them to better understand how social relationships can affect their overall health and well-being.

Some of the most salient discussions were about opioid, alcohol, and cannabis use, as many participants talked about prevalence of use within their community and the need for education about substances. They felt that the concept of "self-medicating" should be addressed, including acknowledging the role of positive social supports within AI/AN communities that are known to enhance resilience (McKinley, Boel-Studt, Renner, & Figley, 2021).

The virtual format proved to be feasible and demonstrated many benefits and advantages for urban AI/AN emerging adults. Participants were able to socially connect with other

AI/AN people, discuss important issues around substance use, and participate in traditional practices, which are all known to increase resilience (D'Amico et al., 2020; Dickerson et al., 2021; Centers for Disease Control and Prevention (CDC), National Center for Chronic Disease Prevention and Health Promotion, & Division of Population Health, 2020). They also were able to cook and pray together and felt encouraged by interacting with other urban AI/AN individuals with similar experiences. Further, the virtual format addressed some of the challenges and barriers of participating in traditional practices within urban areas, including transportation and babysitting costs, and balancing commitments. Participants also enjoyed being able to participate in the comfort of their home, rather than a less familiar office or clinical setting.

This study has some limitations. Focus group and pilot test participants were all from California, and, therefore, do not represent all urban AI/AN individuals in the United States. However, due to the heterogeneity of tribes observed in urban areas of the United States (WTTW, 2018), findings may resonate with AI/AN individuals in other urban areas in the United States. Although the findings suggest that we reached saturation across most themes (which were reported in at least two focus groups across regions), several more idiosyncratic themes emerged suggestive of regional differences that could be explored further in the future to understand this variation. Although the pilot test included AI/AN emerging adults ages 18–25, we did not collect their demographic information. Our research program has since expanded nationwide given the virtual format, and we are currently recruiting across various urban areas in the United States. Thus, we hope to have the opportunity to analyze the potential benefits of TACUNA across various U.S. regions.

5. Conclusion

In conclusion, results emphasize that community involvement is key to development of successful programs for AI/AN individuals. Furthermore, programming needs to address resilience, and should foster the development of cultural pride, cultural connectedness, and social support within urban areas for urban AI/AN emerging adults. Overall, TACUNA begins to address the shortage of feasible and sustainable opioid use prevention programs within urban AI/AN communities and may help to inform policy as it relates to the dissemination and implementation of this program within urban AI/AN communities. It also demonstrates a framework for development of culturally grounded opioid use prevention programs for urban AI/AN emerging adults.

## Funding information

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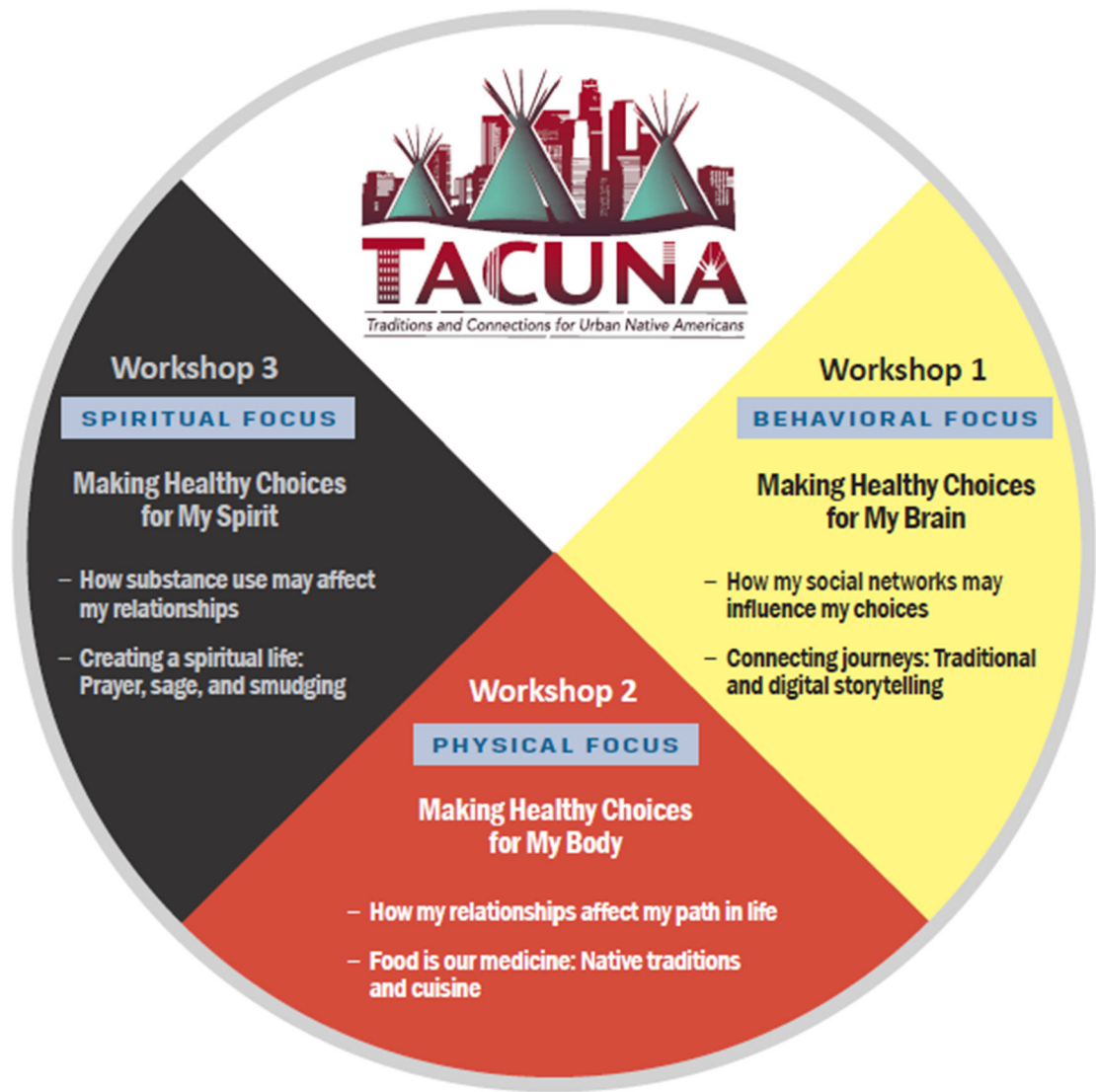
Fig. 1.
Traditions and Connections for Urban Native Americans (TACUNA) medicine wheel.
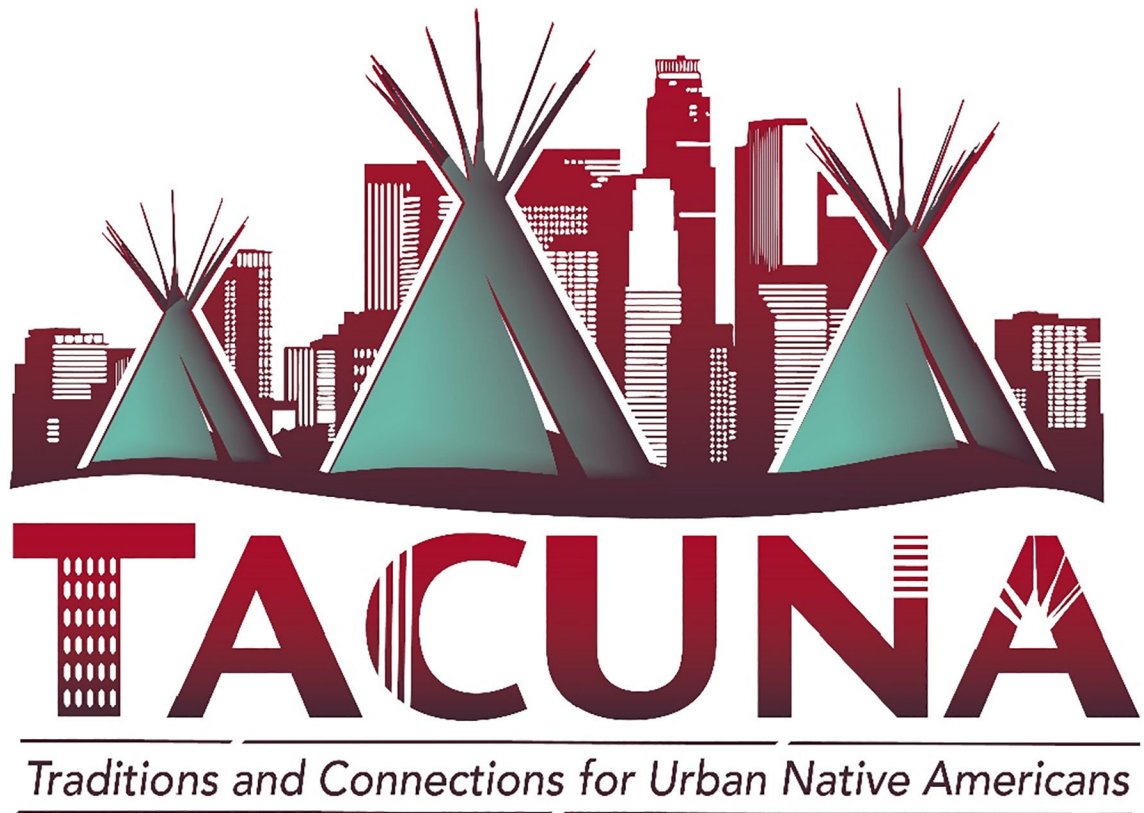
Fig. 2.
Traditions and Connections for Urban Native Americans (TACUNA) logo. Note: Originally
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Table 1.

Focus group characteristics

Focus group Demographics (N=91)			
	Young	**Parents**	**Providers**
	Adults (N = 32)	**(N = 25)**	**(N = 33)**
Age Range (Mean)	18 – 25 (21.5)	27 – 78 (46.5)	23 – 72 (48.9)
Sex N (%)			
Male	10 (31 %)	4 (16 %)	7 (21 %)
Female	22 (69 %)	21 (84 %)	26 (79 %)
Race N (%)			
American Indian/Alaska Native	22 (69 %)	19 (76 %)	19 (58 %)
Mixed Heritage (AI/AN plus other)	10 (31 %)	4 (16 %)	6 (18 %)
Other (White, Hispanic, Black)	0 (0 %)	2 (8 %)	7 (21 %)