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Community Perspectives on Drug/Alcohol Use, Concerns, Needs and Resources In Four Washington State Tribal Communities

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Abstract

Community-university teams investigated substance use, abuse, and dependence (SUAD) and related concerns, needs, strengths, and resources in four Washington State Tribal communities. 153 key community members shared their perspectives through 43 semi-structured interviews and 19 semi-structured focus groups. Qualitative data analysis revealed robust themes: prescription medications and alcohol were perceived as most prevalent and concerning; family and peer influences and emotional distress were prominent perceived risk factors; and SUAD intervention resources varied across communities. Findings may guide future research and the development of much needed strength-based, culturally appropriate, and effective SUAD interventions for American Indians, Alaska Natives, and their communities.

Keywords

American Indian; Alaska Native; Substance Use; Participatory Research; Tribal; Washington State; Native American

“We have a strong sense of identity and a lot of strong cultural values that still exist. There are good, caring, generous, hardworking people here...we can overcome our problems. And we can become more healthy and make sure that our kids and our grandkids have a good place to live.” (Community member/young leader from the current study)

Introduction

Substance use, abuse, and dependence (SUAD) can be harmful and concerning in many American Indian and Alaska Native (AIAN) communities in the Pacific Northwest (PNW).

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Effectively addressing AIAN SUAD may require additional awareness and understanding of current SUAD and related concerns, tribal community diversity, and appropriate research methods. Moreover, the literature suggests that addressing AIAN SUAD may best begin within each community with a primary focus on community- and culture-based strengths and on supporting health rather than treating problems (Basto, Warson, & Barbour, 2012; J. Y. Caldwell et al., 2005; Cochran et al., 2008; Echo-Hawk, 2011; Fisher & Ball, 2005). Such approaches may diverge from general population-validated treatments and underscore the importance of recognizing and understanding local challenges, and utilizing local knowledge, expertise, and other resources to build wellness. AIAN communities can, and do, guide the most appropriate, meaningful, and helpful solutions to address SUAD and related concerns (Dickerson & Johnson, 2011; Echo-Hawk, 2011; Fisher & Ball, 2005).

In general, AIANs experience several health disparities when compared to other Americans, including chronic disease (e.g., diabetes, heart disease, cancer), infant mortality, injuries, lower life expectancy, and higher rates of SUAD (Indian Health Service, 2013). Although health disparities vary among AIAN communities, SUAD disparities have been identified in national (Compton, Thomas, Stinson, & Grant, 2007; Office of Applied Studies, 2007a), rural and reservation (Nancy Rumbaugh Whitesell et al., 2007), and urban studies (Castor et al., 2006). For example, recent national epidemiological data suggest higher rates of past-year substance use disorders among AIANs (Office of Applied Studies, 2007b) and greater rates of abuse and dependence (Compton et al., 2007) compared with the broader U.S. population. In addition, AIAN youth may be at higher risk for earlier initial alcohol/drug use and higher rates of use (Beauvais, Jumper-Thurman, & Burnside, 2008; Hawkins, Cummins, & Marlatt, 2004) and may experience disproportionately higher levels of prolonged use and associated negative consequences (Barlow et al., 2012; Novins D. K. & Indian Adolescent BA, 2004; Whitbeck, Yu, Johnson, Hoyt, & Walls, 2008). Furthermore, SUAD related health and social consequences include higher rates of morbidity and mortality due to illness and disease, injuries, suicide and homicide, and other health, social, and economic challenges (Compton et al., 2007; Hasin, Stinson, Ogburn, & Grant, 2007; Indian Health Service, 2011; N R Whitesell, Beals, Crow, Mitchell, & Novins, 2012).

SUAD and related consequences are not, however, experienced equally by AIAN individuals and communities. National or even regional data do not adequately describe all AIAN communities and may lead to incorrect assumptions. As an illustration, 78% of AIANs live in urban and suburban settings (US Census Bureau, 2011); however, most AIAN research represented in the literature has been conducted in reservation and rural settings. Moreover, many AIANs are healthy and do not use substances (Hasin et al., 2007; Office of Applied Studies, 2007a; Spicer et al., 2003). Neither AIAN SUAD nor non-use is well represented in the literature, and more research in urban and suburban settings is needed.

In addition, AIAN community and cultural diversity present both a challenge and an opportunity because information may not neatly generalize across tribal communities and the reservation, rural, and urban settings in which AIANs live. In Washington State there are 29 federally recognized Tribes, six Recognized American Indian Organizations (primarily serving Urban Indians), and several unrecognized Tribes with varying histories, acculturative orientations, strengths, and challenges (including SUAD). Adequately addressing AIAN

SUAD disparities may require both an awareness of potential commonalities among AIANs (e.g., historic, social, economic, political), and a better understanding of: unique, community-specific SUAD and non-use; the current and historical contexts in which these occur; and local risk and protective factors. AIAN Tribal communities share characteristics that differ from non-AIAN communities (e.g., traumatic histories post-contact, status as sovereign nations, ties to land and natural resources, language, and reverence for culture, Elders, children, and future generations). However, each AIAN community is unique and thus they also differ from one another. Unfortunately, approaches to addressing SUAD for AIANs often have not taken these factors into account and have usually applied interventions and treatments developed with primarily non-AIAN samples. As a result, they have not been culturally tailored, holistic or adequately demonstrated to be effective with AIANs (Indian Health Service, 2006; Office of Inspector General, 1992).

Finally, research within AIAN communities requires a respectful, appropriate, community-specific approach. Community Based Participatory Research (CBPR) and Tribal Participatory Research (TPR) have the potential to increase community and researcher understanding of research questions and issues and to enhance researchers' understanding of community research priorities and needs (Israel, Schulz, Parker, & Becker, 2000; Rosenstock, Hernandez, & Gebbie, 2003; L. R. Thomas, Donovan, & Sigo, 2010). TPR further guides specific protocols for working with Tribal communities as unique, self-governing, sovereign nations (P. A. Fisher & T. J. Ball, 2003). CBPR and TPR emphasize investigator-community collaboration in designing health disparities and health promotion studies that address questions of high importance to the community (J. Y. Caldwell et al., 2005; Cashman et al., 2008; Christopher, Watts, McCormick, & Young, 2008; Cochran et al., 2008; L. Thomas, Rosa, Forcehimes, & Donovan, 2011). CBPR and TPR facilitate community participation and meaningful interpretation, dissemination, and adoption of study findings (Cashman et al., 2008; P. Fisher & T. Ball, 2003; Minkler & Hancock, 2008), all important components to effectively address SUAD.

Furthermore, for some research questions, qualitative or mixed methods approaches might be considered more respectful and acceptable for working with AIAN communities than purely quantitative approaches (J. Caldwell et al., 2005; Fisher & Ball, 2005). Qualitative research enables creative studies that can be designed to best answer research questions within unique community contexts. Multiple sources of data provide validation of the information and enrich a more complete picture (Charmaz, 2006; Corbin & Strauss, 2008), and interviews and focus groups have been widely used with success in AIAN communities (Mail, Hawkins, Radin, & Goines, 2006; Momper, Delva, & Reed, 2009; Strickland, 1999). Respectful researchers recognize community members' experiences and perspectives, expertise, and Tribal or indigenous ways of knowing as valuable resources for creating effective, culturally appropriate interventions and programs (Cochran et al., 2008; Fisher & Ball, 2005; L. R. Thomas et al., 2010). Approaches to AIAN wellness and healing/recovery related to SUAD also benefit from a strength-based focus on resiliency and cultural and community resources (McCubbin, 1998; Mohatt et al., 2004; L. R. Thomas, Donovan, Sigo, Austin, & The Suquamish Tribe, 2009).

Current Study

The current study was an initial step to begin to learn about current SUAD and related concerns, needs and resources in some Washington State (WA) Tribal communities, and to continue to build trust and develop relationships and research partnerships with WA Tribal communities. The study was conceived in response to anecdotal reports and increased concerns that methamphetamine was on the rise in many AIAN communities, including those in WA. This prompted the National Institute on Drug Abuse's (NIDA) National Drug Abuse Treatment Clinical Trials Network (CTN) to fund five exploratory/developmental studies across the United States to investigate current methamphetamine and other substance abuse (L. Thomas et al., 2011). The study was expanded beyond its original focus on methamphetamine since it was clear then that while methamphetamine continued to be a major concern, the most frequently reported substance at treatment admissions was alcohol (Washington State Division of Alcohol and Substance Abuse, 2005) and there was also growing concern about prescription opiate use and abuse in AIAN communities (Akins, Mosher, Rotolo, & Griffin, 2003; Beals et al., 2005; Forcehimes et al., 2011; Momper, Delva, & Reed, 2011; Office of Applied Studies, 2003, 2007a).

The present study sought information from members, treatment providers, Tribal leaders, and persons in recovery in four AIAN communities to: 1) develop qualitative descriptions of community perceptions about health problems related to methamphetamine use, other illicit substances, and alcohol; 2) identify issues of particular concern among staff who provide treatment to AIANs for methamphetamine and other substances in Tribal and/or urban treatment programs; 3) determine the perceived nature, extent, and relative patterns of alcohol and other drug use and their impacts on areas of life function such as medical, legal, social, familial, psychological, economic, educational, and vocational; 4) better understand the strengths, resiliencies, and local expertise and resources that exist in these communities to address concerns; and 5) learn about personal experiences with drug use and treatment, including what might be most helpful or important in overcoming SUAD and what role culturally relevant traditions and values play in treatment and recovery. Here we present the study's primary findings.

Method

Community Collaboration

Community recruitment proceeded from early 2008 through 2009. Researchers initially contacted and discussed research ideas and collaboration possibilities with key contacts and community leaders such as health directors, clinic managers, and research directors in seven WA Tribal communities. We learned of each community's specific research engagement, review, and approval processes. Communities were at varying levels of readiness to participate in this study within the funded time frame, resulting in the formation of research partnerships with four Tribal communities in western WA. All communities initially chose not to be identified in study reports or publications; therefore, only general information about them is shared in this article.

The four communities are primarily reservation based with Tribal enrollments ranging from about 900 to over 3500 members. They are located throughout western WA in rural and urban locations with some access to bodies of water for fishing and other traditional subsistence, and cultural practices. Some Tribal economies benefit from fishing, timber, and a variety of retail, entertainment, and tourism business enterprises. However, not unlike national rates (U. S. Census Bureau, 2007), poverty and unemployment are prevalent in these and other AIAN communities compared to the general U.S. population. Furthermore, communities' health care needs exceed current IHS funding, which has been nationally estimated to cover only about 55% of AIANs' health care needs (Indian Health Service, 2010).

In forming the research partnerships, Tribal governments in each community authorized the research to proceed, and Tribal health boards and legal departments guided and documented the partners' roles, responsibilities, and data ownership and use agreements through formal memoranda of understanding. Each community designated members to form a Community Advisory Board (CAB) and participate in the research planning, protocol development, interpretation of research findings, and review and approval processes. University researchers and CABs worked together to design community-specific research plans and protocols which were then reviewed by the University's Institutional Review Board (IRB). One community also chose an IHS IRB to review research plans and oversee research conduct.

Formal and informal researcher time in the four communities has also been vital to the collaborations' success. As important as study-focused visits, researchers attended (and continue to attend) community events such as cultural dinners, planning meetings, Elders' lunches, and Tribal celebrations as participants and as helpers/volunteers. This helps to develop personal and professional trust and relationships, demonstrates interest in and care for the community that extends beyond research, facilitates communication and progress, and is one of the most rewarding and enjoyable parts of the process.

Interview and Focus Group Questions

Interview and focus group questions were developed with CABs. Questions were similar across the four WA communities with only minor word modifications. A few questions were added for interviews with individuals in SUAD treatment and/or recovery in one community. Questions targeted: general community characteristics, including strengths; perceived current substances of use/abuse and concern; impacts of substance use/abuse/chemical dependency; factors contributing to substance use/abuse; current prevention efforts and resources; current treatment resources, effectiveness, and accessibility/availability; strengths and local expertise; and the role of Tribal/Native/community culture in prevention and treatment. CABs chose to phrase elicitations as "please tell us what you know/think about ____" to draw out personal perspectives instead of what might be perceived as "right," "correct," or "common knowledge."

Interviews and focus group questions were semi-structured with primary, open-ended questions and optional follow-up questions. In practice, follow-up questions were usually asked. Interview/group questions are presented in Table 1, and additional questions for

individuals who were recruited because they were in SUAD treatment at the time of the study are presented in Table 2. Targeted numbers of interviews and focus groups for each community ranged from 10–20 interviews and 4–12 focus groups as recommended by each community's CAB.

Participant Recruitment

Recruitment procedures were almost identical across communities. CABs nominated and approved study participant invitees, including primarily AIAN community members who were health/wellness/social service providers, Elders, spiritual leaders, community and Tribal leaders, educators, members of the clergy, persons in recovery, law enforcement officers, and other concerned community members. A few persons self-nominated by responding to flyers, word of mouth, and other forms of community notification. Once the nominations were given to a researcher/recruiter, each participant's identity was confidential between participant and researcher (i.e., could be shared with others by the participant but not the researcher).

A university researcher spoke by phone or in person to each invitee/interested person and described the study, provided an invitation letter, study description, Information Statement, and the interview or focus group questions. The researcher reviewed the Information Statement with invitees, answered questions, obtained verbal consent, and scheduled a private, one-on-one interview or focus group with those choosing to participate. Focus groups included same-type (e.g., all health care providers) and mixed participants (e.g., Elders, leaders, and other community members). Interviews were available for individuals to share their perspectives privately and/or to allow more time to share. When recruiting persons who were in chemical dependency (CD) treatment in one community, CD counselors privately obtained interested clients' names and then provided these to a researcher/recruiter for the private recruitment process. The three other communities chose not to include active CD treatment clients.

Participants

Overall, 43 interviews and 19 focus groups were conducted with a total of 153 participants across the four WA State communities, as shown in Table 3. Participants were primarily AIAN community members (i.e., residing and/or working within the community), although some participants were non-AIAN. All ranged from recent to life-long involvement with the community. To support anonymity and protect privacy, participants' demographic information was not formally collected; however, payment records indicated that 97 women (63%) and 56 men (37%) participated.

Data Collection

Data collection took place between November 2009 and May 2010. The vast majority of interviews occurred in each interviewee's respective community, with rare exceptions by telephone. All focus groups were held in participants' communities. The same university researcher conducted all interviews and focus groups, and most groups were co-facilitated by a CAB member or CAB-designated community member. Facilitators audio-recorded discussions with all participants' permission (no one declined) and kept handwritten notes.

Interviews/groups were primarily held in community buildings and meeting spaces to maximize participant comfort and privacy. Each participant received a \$25 gift card or check.

Participants appeared to share their perspectives openly and willingly. Interviews averaged one hour and focus groups lasted two hours, resulting in roughly 75 hours of audio recordings. Recordings were transcribed verbatim by a researcher or a hired transcriptionist and transcripts were carefully reviewed by researchers to remove person and community identifying information. Interviewees received their own transcripts to review and were given the opportunity to make revisions; 13 did so. Audio-recordings were destroyed to protect participants' identities.

Data Analysis

There are many ways to utilize qualitative data (Creswell, 2009). Our aim was not to develop theory but rather to explore and document descriptions of communities. Therefore, we chose a process of coding, memoing, second-coding, refining codes, summarizing primary themes along with illustrative quotations in reports, and sharing draft and final reports with CABs for their validation and input.

At the end of data collection, saturation had been reached and new cases did not provide new information (Corbin & Strauss, 2008). We organized, managed, coded, analyzed, and interpreted the large volume of text using qualitative data analysis software, ATLAS.ti 6 (Friese, 2011). Although each community's data were analyzed and disseminated separately for their own use, one code list was developed using all communities' data. The initial code list contained over 200 codes developed through a process of line-by-line "free coding" of words, phrases, sentences, and paragraphs by one researcher/coder to encompass any information that was relevant and/or could be meaningful to include in reports to communities, and by keeping notes or memos about themes and interesting or unusual information found within the data.

Further code list development took place among multiple coders through a process of independent coding, coding comparisons, discussions, and code refinement. One researcher coded all transcripts and four research assistants coded several transcripts each. Information and themes that were most strongly represented in the data resulted in nine broad categories (Table 4) with a number of sub-codes within each (e.g., Table 5), resulting in 69 different codes. Codes were developed to identify distinct information and quotations within the transcripts. Each code combined a primary/broad category code and a sub-code. For example, when participants shared historical community information the code assigned was "community history." Furthermore, a single quotation could be coded several times, thus overlapping codes. A code book containing code descriptions and coding guidelines helped to standardize the process among coders. Codes were shared with each community for validation.

Although quantitative reliability checks are not necessarily appropriate for qualitative data (Sandelowski, 2001), we chose to further evaluate our codes, coding system, and reliability between coders by randomly selecting and comparing the detailed, line by line coding

between coders across 17 transcripts. We used a simplified reliability formula with the number of coding instance agreements divided by the number of agreements added to disagreements (Miles & Huberman, 1994). The formula does not account for the probability of coders choosing the same code by chance because the probability of choosing the same code by chance alone would have been very small or insignificant due to the large number of codes in the list. The range of reliability percentages across the 17 code-comparison transcripts was 59.46% to 86.57%, with a mean of 74.86%.

Results

Primary themes across the four participating WA communities and notable differences between them are summarized here with integrated quotation exemplars to communicate information in participants' words. Community CABs or publication committees reviewed and approved this paper, its contents, and its interpretations.

Community and Culture

Community and culture were closely related with themes overlapping both. Participants primarily emphasized community and cultural strengths, but also shared challenges. They described their communities and people as family-based, "very closely bonded," "interconnected," supportive, caring, positive, and progressive. Extended families include those living in the household, secondary social support, extended family, and close friends. Extended families form the "social fabric" of the communities where "family connects everybody and everything and everything eventually boils down to family issues." Tribal and community cultures and traditions are interwoven throughout daily life with regular community gatherings that "unite" and "bring people together." Participants attributed their "sharing, caring, loving, and giving" among extended family and community members, their "nature to help their families and people in need," and their strong connection to the Tribe to how they have historically "helped each other survive, as a whole" amid the challenges, hardships, and traumas that their Tribes have endured. As one participant stated, "I can't even begin to put words on what the Euro-Americans did to the Native people. And that, [in] one way, shape, or form, I think plays out and plays into every Native American person walking the streets, whether they realize it or admit to it or not."

Participants also noted cultural changes over time where communities have "lost the community feel" and shifted into more of a "nuclear family" environment with less free-flowing communication and loss of the prominent roles of Elders. They reported, "culturally we've been making a really big, a strong effort, I guess a comeback effort" in order to "make sure that we don't lose that culture and the language...that keeps our people one and keeps us whole, and...that we remain the people that we're intended to be." According to participants, returning to cultural ways, reclaiming lost and stolen cultures, and renewing cultures and traditions has the power to heal and strengthen individuals and communities through a sense of connection, positive identity, spirituality, and a healthy way of living, particularly for younger and future generations. As one person stated, "It's a healing - like a healing process of removing the old bad spirit and replacing it with something good."

Participants further expressed appreciation of current community progress and hope for better futures. Many stated that they have strong leaders and positive role models who actively support health and wellness priorities, community unity, and individual accomplishments and contributions: “The opportunities are there to improve yourself and your life and not just kind of float through it. They really are pushing for people [to] ‘Be all you can be.’ Be it help with drugs and alcohol or help with educational opportunities.”

Current Drug/Alcohol Concerns and Challenges

“I think the substance abuse is the number one threat to the Tribe as being a cultural nation, because if we get so many of our population ‘checked out,’ then they’re alive but they’re really dead inside.” (Community member/health care provider)

Participants consistently stated that SUAD are some of the most challenging, concerning, and difficult problems in their communities, and there was little variability in the reported substances of primary concern for each community. Prescription medications, primarily opioid pain medications such as oxycontin and methadone, were perceived as the most alarming and concerning in all communities: “It has affected every family in one way or another, and has been very devastating.” Alcohol was identified as most prevalent and viewed as less damaging than prescription medications in the short-term, but potentially more damaging long-term. Methamphetamine was reported to still be present in all communities, but not as prevalent as in the past, with the exception of one community where participants felt it ranked about equal with alcohol as a concern: “Meth didn’t go away completely.” Marijuana was a concern but mentioned less often and with less emphasis: “A lot of people don’t mention marijuana because...it’s used so widely that everybody thinks, ‘Well, that’s not a drug, it’s just what we do.’” Lastly, a noticeable perceived increase in heroin use was reported and other substances or addictions were occasionally mentioned, such as tobacco, cocaine, inhalants, hallucinogens, and gambling.

Participants also shared SUAD-related concerns. They reported a lack of understanding and misperceptions about prescription medications safety and poly-drug use, which may contribute to overdose potential. In addition, communities and providers are carefully guarding against misuse and abuse of prescription medications, but this may create difficulties for those individuals who genuinely need adequate pain management.

More generally, participants referred to an escalating severity of SUAD and related negative consequences, and an increasingly medication-oriented society: “But that’s the thing that’s changed, you know, is that people are stealing, people are dying” and, “The whole societal norm is changing. If you’ve got a headache, take this. If you’ve got a stomach ache, take this...think of how they market to our children.” Concerns about children were often mentioned, such as younger ages at first substance use, sometimes within families: “Children with their parents and their parents’ parents...it’s normal in their home...to do some kind of drug.” Finally, participants expressed a need for concurrent SUAD and mental health treatment, as relapse is common.

Drug/Alcohol Availability and Accessibility

Participants reported that drugs and alcohol are easily accessible and available and there are a “variety of ways” to obtain them. “People will go to something that is readily available and reasonably inexpensive.” Drugs are reportedly obtained from friends, peers, and family members through sharing, purchase, or theft. Also, persons from outside the community bring substances in to sell/distribute, sometimes with the intent of setting up long-standing distribution: “It’s profitable for people to handle it, and that makes it very accessible.” Substances might be more accessible in communities that are closer to major metropolitan areas; however, even in remote, less accessible areas “they find a way in” (e.g., by boat). According to participants, Prescription medications may be obtained from multiple providers, emergency rooms and the internet, and when a Prescription medications drug source “dries up” some seek “cheaper” heroin. Finally, participants shared concern about how obtaining substances, especially Prescription medications, can harm vulnerable people and drug seekers: “We’re seeing evidence of...Elder abuse around drugs and getting access to them, whether it’s stealing money or the actual drug itself;” and, “They will hurt themselves to get the pain pills. I have even heard of somebody pulling their teeth.”

SUAD Harms and Impacts

Participants primarily emphasized SUAD harms to families and children. SUAD creates a difficult environment for generations of family members through the absence of healthy parenting; reduced care, support, and opportunities for children; fetal alcohol (and other drug) effects; lack of healthy/positive role models; exposure to SUAD; and compromised futures. As one person stated, “I think there’s the disruption in the social system where children and families don’t get to be children and families because of the abuse of substances.”

Whole communities may also suffer the consequences of SUAD, including “breakdown” of culture and wellbeing. As one participant stated, “I think it contributes a lot more than we’d like to think it does to a general feeling of depression.” Another participant shared, “Well, culturally, it’s not being passed on. Like what our Elders are trying to teach those kids, they’re not learning...they are not being taught what they should be taught, culturally, mentally...just being Native.” Furthermore, SUAD strains relationships and erodes trust when “people become frustrated by not knowing what to do and how to help.” SUAD diverts resources away from other community needs, and impedes community progress: “The health of the community is undermined and sabotaged because the healing that the whole community needs isn’t happening.”

Harms at the individual level were primarily described in terms of consequences for families and community, as those who experience the medical/physical, psychological, and other effects of their addiction are compromised in their ability to be productive, contributing members. Some effects on individuals are more obvious, such as compromised physical health. Other perceived effects are less straightforward and may impact a person at a deeper level, such as poor mental health, separation from family and traditional/Tribal culture and spirituality, and low self-esteem. As a participant shared, “It demoralizes you. It separates

you from who we're supposed to be in the Creator's eyes and we don't make proper decisions for us or our families. And we get away from our spirituality.”

Why People Use/Abuse Substances

Participants shared what they believe are the most influential factors that contribute to SUAD in their communities. Solid themes emerged across communities with minor variations. In the three smaller, reservation based communities, participants spoke most often about the influences of families and peers on SUAD and second most often about substance use as a way to change feelings (e.g., “escape,” “cope,” “feel good”). In the larger, more dispersed, non-reservation community, changing one's feelings was most often shared as the primary factor leading to SUAD, with family and peer influences discussed second most often. In addition, many participants talked about the complexity and multiple causes of SUAD, their overlap, and their links with other risk (and protective) factors.

According to participants, SUAD within some families may be “the norm” and become “cyclically reoccurring generational activity; kids saw their parents do a lot of this, so modeling behavior.” In addition, “because [the community] is small, usually it is family members who use together. It's not like it's a friend that you can get rid of, it's your family.” Family instability, problems, and disputes were also reported contributors to SUAD. Furthermore, peers influence SUAD in similar and powerful ways. Participants reported that individuals want to belong or “fit in” and, therefore, adopt friends' behaviors. In addition, many participants spoke of strong, overt pressure from others to use that may be particularly difficult for those trying to abstain.

SUAD was also often reported to be a way to change one's feelings or to cope with depression, negative feelings, and other mental health challenges, to “escape” or “avoid” pain, to “not feel,” or to “feel good.” As one participant described, “They want to escape reality and this gives them the ability to escape their feelings, their emotions, and never have to deal with them.” It was commonly perceived that SUAD results from “undiagnosed mental health...because they begin to start using at a very young age, to self-medicate.” Many participants also referred to SUAD as something to fill a “void” or “emptiness,” or to compensate for “something that is missing.”

Participants generally declared that the same influences/risks for SUAD in the general population also apply to AIAN people. However, many noted that AIANs have disproportionately experienced racism, historical trauma, hardships, and losses that have led to greater vulnerability to SUAD, depression, shame, guilt and anxiety for some AIANs. As one participant explained, SUAD is a way “To escape their pain... there's so much historical trauma, generational trauma. Then we go to what do we learn in our family? What do we see? It's just generation, after generation, after generation...because that pain is so intense.” Another stated, “It's like it's not a fair hand, like you get dealt this bad hand.”

Community factors may also contribute to SUAD, according to participants. These include living in a small, close knit community with easy access to substances, exposure to others' use of substances, the “pervasiveness” of SUAD, an abundance of shared community grief and loss, and limited opportunities (primarily for employment). In addition, especially in the

smaller communities, participants explained that the Tribal value of not “turning your back on your family” might translate into “denial” of a loved one’s situation or “enabling” continued SUAD once it has begun. As one mother shared, “I had my son tell me, ‘You don’t love me. You don’t care about me. You don’t care about my kids.’ Mmm – It hurt! But I had to take it and stay strong and not enable him, because I wouldn’t give him money.”

Finally, participants described SUAD as progressive, often beginning with experimentation and casual use, and “then you become addicted.” They also conveyed that there is “any variety of reasons” in multiple combinations that might contribute to SUAD and one might not be able to ascertain what they all are. One person described the elusive nature of causes: “You can be from a home where you have both parents there. They’re working, they’re providing a good home, and the kid can still get into the prescription abuse.”

Prevention, Treatment and Recovery

The four communities were less similar in participants’ perceptions and reports of their community’s existing SUAD prevention, treatment/recovery services, and related resources.

Prevention—SUAD prevention was highly valued in all communities: “I think that if you can prevent contact with substance abuse it’s far more effective than any level of treatment.” However, some participants readily commended their community’s prevention efforts, while others simply stated that they were aware of some prevention efforts. Likewise, some participants felt that their communities were doing all that they could in terms of prevention, while others had several suggestions for improvement.

The most often reported and valued prevention efforts included community, Tribal, and family support and involvement for health/wellness and “rallying around those people that are having problems with drug and alcohol abuse.” Also, building self-esteem, positive identity and pride through “clean and sober” community/Tribal culture, traditions, and related opportunities, events, and activities were highly touted: “I think the more that you can teach kids about history and culture helps them figure out their role here in our community. And I think, when they figure out how much they’re relied upon...counted on...watched...and expected to learn and to contribute, that’s good prevention.” Participants also praised positive and respectful general and SUAD-related education and youth recreation and prevention programs. Positive role models, churches and spirituality, and drug court were also reported to be helpful for prevention.

Regarding prevention challenges, some reported that prevention might not be well understood, and there is a need for funding and other resources to build prevention programs, teach healthy life skills, and work with families. In addition, Prescription medications abuse presents a special challenge since Prescription medications are also used to legitimately treat pain. Participants reported that communities are addressing this challenge with better communication between Tribal health programs, providers, and prescribers. In addition, health clinics establish pain contracts with patients, prescribe more carefully, educate patients, and offer alternative pain management therapies.

Treatment and recovery—Variation also existed in reported treatment/recovery options, services, and resources across the communities. Some variability was related to individual participants' awareness, expectations, and opinions about existing resources; however, community location and economic resources contributed greatly to these differences. Some participants praised their community's SUAD treatment programs, services, and staff. The most valued components included accessibility, supportive providers, individualized approaches, positive cultural activities, helpful group therapy, attention to the "whole person," and communication and coordination between programs and departments. These participants felt fortunate to have resources available to them and some recognized that resources differed among communities. In other communities, participants reported that individuals often must go outside of the community for intensive treatment (no inpatient services existed in any of the four communities), and they identified a great need for in-community care and sober housing for individuals returning from intensive programs.

Many of the reported primary treatment/recovery supports and resources were not part of established programs; however, most participants thought that true, healthy recovery without some sort of formal treatment was not possible. Important components of successful recovery were thought to include accessible, individualized services/programs with caring, skilled, and culturally competent staff and programs that include Tribal culture (e.g., language, ceremonies, drumming, sweat lodge, beading, traditional ways of healing, and cultural values). Involving families in the treatment/recovery process was also thought to be important "because the disease is not just the person, it affects the entire family" and they can learn healthy life skills together. Similarly, community involvement fosters a more encompassing healing environment. Participants also felt that good communication among various programs contributes to smooth provision of services. Additional aids to recovery included sharing one's story, 12-step programs, positive role models and mentors, finding meaning in life, spirituality, and involving Elders.

Participants also shared challenges related to treatment and recovery within their communities. Treatment services can be difficult to access and some participants reported that not everyone has equal access to treatment or the resources to pay for it. Participants felt that communication and coordination between health/service programs is improving, but is not what the various programs hope it could be, and different programs' primary goals might be at odds. For example, a family services program returns a child to a parent who is in SUAD treatment before treatment providers believe their client is ready to parent again. Participants also reported their belief that treatment will not benefit an individual who is not "ready" and/or whose home environment does not support recovery. Finally, treatment programs were seen as often having high staff turnover, individuals do not have supportive recovery housing post-inpatient treatment, and some people lack awareness of the community's treatment/recovery resources.

Individual experiences with treatment and recovery—As only one community requested that persons currently in SUAD treatment be included in the study, only four such persons were interviewed about their personal experiences with treatment and recovery. The information they shared was consistent with other participants' reports and they also introduced novel and insightful ideas. They reported that their desire to keep family and peer

relationships intact either influenced them to continue or to stop use, depending on the health and wellness of their family members or friends (e.g., whether they used substances). Interviewees also reported that they had had significant hardships in their lives, including a history of abuse, as well as the deaths of many people close to them. Substance use reportedly guarded them from negative feelings and emotions. Barriers to entering treatment and what was most difficult during treatment and throughout recovery primarily included personal challenges. These included low self-worth, “not wanting to feel anything,” viewing asking for help as a “weakness,” being physically unhealthy, not feeling ready to change, and cravings/urges to use. Other barriers included lack of inpatient availability and concerns over confidentiality in a small community. In addition, participants stated that they did not want to be separated from family and friends, and that pressure from family and friends to not change was also a barrier to recovery.

However, these interviewees focused on the positive and spoke mostly about what helped them to enter and engage in treatment and recovery. They reported that personal strengths and reflection were very helpful, such as thinking positively about recovery, having strong commitment to the process, and owning responsibilities such as caring for children. All stated that they had reached a critical point when they truly wanted to change and better their lives. They also reported that support and assistance from “clean and sober” others was crucial and helped them to feel that they were not alone. In addition, they learned coping skills and engaged in traditional, cultural, spiritual, and community opportunities, because “drugs and alcohol are nowhere around my culture.” Finally, family services and CD treatment programs and the recovery process itself became great influences. One participant described her feelings: “I like myself and accept myself more, today, than I ever have in the past, you know. And it’s just...I could change now. I could accept it.”

Strengths, Resources, Recommendations, and Continuing Needs

Participants frequently shared strengths, resources, recommendations, and needs (i.e., across all code categories) and often viewed community strengths and resources as the means to effectively address SUAD. They suggested continuation of existing prevention and treatment efforts with a focus on overall health and wellness, and they recommended services that did not exist in the communities. Six primary domains of strengths, needs and recommendations emerged across all four communities: 1) culture and traditions; 2) education; 3) family and community involvement; 4) treatment/recovery services; 5) mental health and healing from trauma; and 6) utilizing community strengths and resources.

1) Culture and traditions—Participants indicated that treatment would improve if more culture and traditions were incorporated into community health and wellness, including SUAD prevention and treatment, and if more cultural opportunities were offered in general. Examples included teaching cultural values and beliefs, passing on traditional knowledge, and incorporating traditional ways of healing and cultural and traditional activities, such as drumming, beading, language, ceremonies, gathering and weaving cedar, and fishing and preserving fish through smoking, drying, and canning. In addition, learning about one’s culture helps to build pride and a positive sense of identity. Described by one participant: “I think that all [culture, traditions] should be part of it. If it’s not...it’s an incomplete process

for [our] people. It must be in place, it must be done, or else there's holes in what's being provided in the healing process.”

2) Education—Participants urged additional “sympathetic and compassionate” education for everyone, which might include information about addiction, parenting, family support, ways of healing, existing services and opportunities, and healthy life skills. They also recommended in-community sharing of positive information and healing messages, and encouraged education about the positive effects/outcomes of participation in traditional culture and how to best help people who use/abuse substances, particularly family members and friends. As demonstrated by one participant’s comment: “Help educate them because education is everything.... I see in the patients that it helps to renew their self-esteem. They have something to offer – they can teach somebody else. And they’re realizing...’Maybe I am valuable’...and that helps them stay in group. It helps them be more engaged. It helps get the families more engaged.”

3) Family and community involvement—Participants recommended increased community and family support and engagement in efforts toward improving health, wellness, and recovery from SUAD. This included support for children and families, family participation in treatment/recovery, clean and sober community-supported events and activities, and fellowships. Positive role models and role modeling were also important. Described by a participant, “The whole thing is family and a community and being together and I think that’s what needs to be stressed in our community.”

4) Treatment/recovery services—Participants also stressed the importance of building SUAD treatment services offered within the community, including more continuing care/ “aftercare” following inpatient treatment that includes a safe, clean and sober environment in which to transition back to the community. In-community treatment could also benefit from inpatient treatment or a “*healing*” center, as participants reported that it is difficult for some individuals to leave the community for treatment elsewhere, and the community best knows its members’ needs. In addition, providing culturally-based, holistic, individualized services and/or an overall, long-term plan will help individuals build confidence, skills, and a positive sense of self and well-being. Offering a blend of Native and non-Native based approaches was also highly regarded. As one participant explained, “The onus really is on the programming, and to insure that these people are trained and developed enough to run effective programs. And... if you’re running an effective program, you really need to have people that are really culturally competent and very culturally sensitive, and even youth centered sensitive.”

5) Mental health and healing from trauma—Participants recommended helping community members to have positive mental health by addressing mental health conditions, encouraging healing from historical/intergenerational trauma and unresolved grief, and providing care for co-occurring disorders. Aptly described by one participant as a community and individual process:

“We, as a community, suffer from generational trauma...and I think that is a huge impact and a lot of our community members would benefit from knowing what that

means to our community, because it also is related to generational poverty. I think that that information could empower our community more to where it's healing and, because I always think about people in recovery, that they have had more of an opportunity for self-healing and because of that they end up having a lot more joy in their life because they're really looking at themselves and where they are, where they've been, where their family is, and where they want to go."

6) Utilizing community strengths and resources—Overall, participants stressed that adequately addressing SUAD within their communities should utilize their own strengths and resources, particularly their motivated, caring and energized people who contribute to ongoing health/wellness efforts. As one interviewee stated, "I do think it needs to move away from the context of treatment centers, more towards healthy communities. It needs to be happening within the community as opposed to out there somewhere. The two aren't melding together." Also, promoting healthier communities should incorporate community and Tribal cultures and values, including interconnected families with long histories of taking care of one another and relationships on which they can rely: "We gotta figure this out together. We need each other, all of us." They have witnessed progress, such as more sobriety, more help-seeking for SUAD, increases in available services, and successful health promotion efforts. They look forward to continued community healing through a return to Tribal culture and spirituality and incorporating community values and practices into SUAD prevention, treatment, and recovery. Participants expressed hope and a strong desire to unite their people and communities to advance health, wellness, and a better future for generations to come. "They embrace the people that are having the problems, as being their relatives, as being their sons and daughters, as being their uncles and aunts, you know, mothers and fathers. And bringing them into a place where they feel loved and cared for and concerned about...gives them that kind of an uplifting, enlightening approach to healing."

Discussion

Participants shared a wealth and variety of insightful perspectives and cohesive, community-grounded knowledge that addressed research questions and provided a breadth and depth beyond what was initially sought. Participants' insights allowed detailed descriptions of, and helped us to begin to understand, each community's current SUAD use, related concerns, effective interventions, and community strengths, resources, and needs. A respectful, qualitative approach resulted in a large volume of data which revealed robust themes shared among communities and enabled the detection of small community differences. These findings and the development of community-university research partnerships through CBPR/TPR will allow us to move forward with next steps toward working together to eliminate AIAN SUAD health disparities and improving AIAN health in a community-driven, culturally appropriate manner.

Regarding current SUAD concerns, we learned that the participants from the four WA communities considered prescription medications, particularly opioids, most alarming, and alcohol most prevalent. In addition, although participants felt that methamphetamine had declined since around 2006–2007, it was reported to be among one community's top three concerns. Marijuana was also commonly reported in all communities but was viewed as less

harmful, in part due to more permissive attitudes toward it. The same was true for tobacco and gambling. Furthermore, rising heroin use was reported in some communities and believed to be a result of increasing restrictions on the availability/accessibility of Prescription medications and their high cost. This appears to be currently happening (i.e., in early 2012) according to recent discussions with community partners, reports from other reservation and Native communities (Momper et al., 2011), and WA State epidemiological evidence for the general population (Banta-Green, 2011), and indicates the importance in obtaining timely information about SUAD trends, perhaps by utilizing local/community SUAD reporting systems. Moreover, high similarity among participants' concerns and small variations suggest that both regional and community-specific influences exist and should be considered in future research and intervention efforts.

Participants also shared concerns regarding the harms and impacts of SUAD. Families and children were perceived to be the most harmed by SUAD, followed by community and Tribe, and then individuals. In each case, participants described multiple, intertwined SUAD consequences that affect many people in emotional, physical, psychological, economic, social, and spiritual ways. For example, individual deterioration via SUAD impacted family and friends, and also harmed the community through the loss of individual contribution and productivity. Furthermore, participants felt that SUAD created a web of negative consequences through diversion of precious community resources and the powerful presence of behavior that is "not being part of [the] culture."

Participants from the four communities were also highly similar in their perceptions regarding the development of SUAD and related risk and protective factors. All participants identified families, peers, and emotional coping as primary contributors to SUAD. SUAD was also described as the result of complex processes and multiple causes. For example, consistent with a "gateway" model (Golub & Johnson, 2001), a likely process could begin with alcohol and/or marijuana experimentation in order to fit in with peers; enjoyment of the feeling and camaraderie leading to continued use, later use for emotional coping, use of other substances; and progression to unintentional abuse and dependence or addiction. There were also small differences between communities in reported SUAD risk factors. It appeared that social learning and peer influences may be most prominent in the three smaller communities where individuals are in closer, more cohesive contact with one another, while emotional coping may be primary in the larger, more geographically dispersed community. More investigations of community level factors and the variable SUAD pathways are needed, to also include the legacy of historical traumas and their effects on mental and behavioral health. Mixed methods studies could also help to detect and elucidate small differences and their potential importance in SUAD and recovery.

Overall, participants' understandings of SUAD development best fit a biopsychosocial model (Donovan, 1988). However, any model could be incomplete without incorporating a major influence in AIAN communities, historical and current multigenerational trauma and loss and forced assimilation. All participants discussed this in terms of overall health, wellness, and SUAD. Most participants did not believe in a genetic disposition toward SUAD, but they did describe vulnerability related to their shared histories of hardship and loss and current stressful experiences that are tied to continued social and political forces.

Participants often referred to cultural and spiritual losses that have created a “hole” or “something missing” in many AIANs. One SUAD paradigm that takes these AIAN-specific risk factors into account is the Indigenist Stress Coping Model (Walters, 2002). Unlike other models, it specifically incorporates past traumas (i.e., stress) as risk factors for current health outcomes, including SUAD and mental health, and includes “cultural buffers” such as family and spiritual coping as potential moderators of stress. This may be an important conceptualization of AIAN health, in addition to an ample consideration of all relevant social and environmental factors that contribute to health and health disparities (Marmot, 2005).

Despite similar SUAD perceived prevalence and levels of concern across communities, intervention services and resources were not equally available or accessible. Some participants reported that their communities benefited from higher levels of SUAD prevention and treatment services and options, but all participants felt there were continuing needs for improvement. Communities also varied in economic resources and related struggles for meeting basic health care needs for their people. In all communities, participants felt that needs surpassed available resources.

There also was some variation in what was stressed both as a risk factor and the most important component of SUAD recovery. Participants in one community overwhelmingly stressed the importance of family and community involvement. In other communities, participants primarily emphasized the importance of Tribal and community culture and traditions. It is possible that these very small differences were related to community characteristics such as the possession or lack of protected land (e.g., reservation) and the geographic distribution of Tribal members. Other influences on community differences may include the ease or difficulty of retaining Tribal culture, traditions, and connection over time; the availability of economic resources; and the nature and degree of losses, trauma, and exposure to forced assimilation. Future research may help to elucidate these factors and their differential effects for communities.

There was, however, a high degree of consistency in reported SUAD intervention needs and recommendations across communities. Primarily, participants recommended continuing to build cultural strength and turning to what kept their people healthy in the past, such as their values, social relationships, and spirituality. Incorporating culture and traditions into SUAD interventions could include beading, drumming, language, ceremonies, fishing or other local practices, and sweating (in lodges, when acceptable) as culturally appropriate settings in which to learn healthy life skills and build pride, respect, and a positive identity. This is consistent with the literature that suggests AIAN culture and traditional practices are important for AIAN health, wellness and recovery from SUAD (Allen et al., 2006). Participants also recommended sensitive and respectful SUAD and life skills education for everyone, including families in interventions and enlisting community support, and building formal prevention and treatment services, especially in-community intensive care, long-term (continuing) care, and recovery housing. Finally, improving mental health and “healing from trauma” were also high priorities.

Positive progress is underway in the four communities and many community members contribute to these efforts. There is a desire to utilize community strengths and resources to address SUAD and related challenges, and to focus on health and wellness versus problems. Moreover, although it is beyond the scope of the current study, findings suggest that future effective SUAD interventions should begin from within the community, which adds to recent dialogue about whether non-Native-derived, “evidence-based practices” should blend with cultural and traditional practices, or whether cultural and traditional practices may best stand alone as effective AIAN interventions (Gone & Calf Looking, 2011; Lucero, 2011).

Limitations

As AIAN Tribal communities are diverse in many ways, it is important to note that this study’s findings apply only to the four Tribal communities that participated in the study, and only from the perspectives of the study participants from each community. Participants were nominated and recruited for their knowledge and proximity to SUAD (whether professional or personal), related concerns, and recovery, and therefore do not represent the opinions or perspectives of all community members. Also, because only one of four participating communities was non-reservation based, findings do not well represent the perspectives of urban American Indians (i.e., not residing on a reservation). However, considering that there are some similarities among Tribes (e.g., risk factors such as histories of trauma and losses) and common themes were found throughout the four communities, it is reasonable to assume that some of the information would generalize to other AIAN communities and people.

Conclusion

The ability to follow careful, thoughtful, flexible, and collaborative CBPR/TPR processes with our community partners enabled the success of this study. Findings may be used to inform future research questions related to SUAD recovery and to guide the development of more appropriate, specific, and effective SUAD interventions. Furthermore, as communities own the data they may use them in any way they choose. With attention toward community strengths, participants acknowledged challenges with a “*how can we address this?*” attitude and a desire to continue positive work. As long as our research partnerships are beneficial and communities choose to continue collaborative work, we will develop our next steps together. Based on study findings and early and recent discussions with community partners, further exploration of the role of Tribal culture and traditional practices in healing and wellness related to SUAD and mental health is a logical and essential future direction.

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References

- Akins S, Mosher C, Rotolo T, Griffin R. Patterns and correlates of substance use among American Indians in Washington State. *Journal of Drug Issues*. 2003; 33(1):45–71.
- Allen J, Mohatt GV, Rasmus SM, Hazel K, Thomas L, Lindley S, et al. The tools to understand: Community as co-researcher on culture-specific protective factors for Alaska Natives. *Journal of Prevention and Interventions in the Community*. 2006; 32(1/2):41–59.
- Banta-Green, C. Opiate use and negative consequences in Washington State. Seattle, WA: Alcohol and Drug Abuse Institute, University of Washington; 2011.
- Barlow A, Tingey L, Cwik M, Goklish N, Larzelere-Hinton F, Lee A, et al. Understanding the relationship between substance use and self-injury in American Indian youth. *The American Journal of Drug and Alcohol Abuse*. 2012; 38(5):403–408. [PubMed: 22931073]
- Basto E, Warson E, Barbour S. Exploring American Indian adolescents' needs through a community-driven study. *The Arts in Psychotherapy*. 2012; 39:134–142.
- Beals J, Manson S, Whitesell N, Spicer P, Novins D, Mitchell C. Prevalence of DSM-IV disorders and attendant help-seeking in 2 American Indian reservation populations. *Archives of General Psychiatry*. 2005; 62(1):99–108. [PubMed: 15630077]
- Beauvais F, Jumper-Thurman P, Burnside M. The changing patterns of drug use among American Indian students over the past thirty years. *American Indian and Alaska Native Health Research*. 2008; 15(2):15–24.
- Caldwell J, Davis J, Du Bois B, Echo-Hawk H, Erickson J, Goins R, et al. Culturally competent research with American Indians and Alaska Natives: Findings and recommendations of the first symposium of the work group on American Indian research and program evaluation methodology. *American Indian and Alaska Native Health Research*. 2005; 12(1):1–21.
- Caldwell JY, Davis JD, DuBois B, Echo-Hawk H, Erickson JS, Goins RT, et al. Culturally competent research with American Indians and Alaska Natives: Findings and recommendations of the first symposium of the work group on American Indian research and program evaluation methodology. *American Indian and Alaska Native Mental Health Research*. 2005; 12(1):1–21. [PubMed: 17602391]
- Cashman SB, Adeky S, Allen AJ III, Corburn J, Israel BA, Montano J, et al. The Power and the promise: Working with communities to analyze data, interpret findings, and get to outcomes. *Am J Public Health*. 2008; 98(8):1407–1417. [PubMed: 18556617]
- Castor ML, Smyser MS, Taulii MM, Park AN, Lawson SA, Forquera RA. A nationwide population-based study identifying health disparities between American Indians/Alaska Natives and the general populations living in select urban counties. *American Journal of Public Health*. 2006; 96(8):1478–1484. [PubMed: 16571711]
- Charmaz, K. *Constructing grounded theory: A practical guide through qualitative analysis*. Thousand Oaks, CA: Sage; 2006.
- Christopher S, Watts V, McCormick AK, Young S. Building and maintaining trust in a community-based participatory research partnership. *Am J Public Health*. 2008; 98(8):1398–1406. [PubMed: 18556605]
- Cochran PA, Marshall CA, Garcia-Downing C, Kendall E, Cook D, McCubbin L, et al. Indigenous ways of knowing: Implications for participatory research and community. *American Journal of Public Health*. 2008; 98(1):22–27. [PubMed: 18048800]
- Compton WM, Thomas YF, Stinson FS, Grant BF. Prevalence, correlates, disability, and comorbidity of DSM-IV drug abuse and dependence in the United States: Results from the national epidemiologic survey on alcohol and related conditions. *Archives of General Psychiatry*. 2007; 64:566–576. [PubMed: 17485608]
- Corbin, J.; Strauss, A. *Basics of qualitative research, 3e: Techniques and procedures for developing grounded theory*. Thousand Oaks, CA: Sage; 2008.
- Dickerson DL, Johnson CL. Design of a behavioral health program for urban American Indian/Alaska Native youths: A community informed approach. *Journal of Psychoactive Drugs*. 2011; 43(4):337–342. [PubMed: 22400466]

- Donovan, DM. Assessment of addictive behaviors: Implications of an emerging biopsychosocial model. In: Donovan, D.; Marlatt, G., editors. *Assessment of Addictive Behaviors*. 1988.
- Echo-Hawk H. Indigenous communities and evidence building. *Journal of Psychoactive Drugs*. 2011; 43(4):269–275. [PubMed: 22400456]
- Fisher P, Ball T. Tribal Participatory Research: Mechanisms of a Collaborative Model. *American Journal of Community Psychology*. 2003; 32(3/4):207–216. [PubMed: 14703257]
- Fisher P, Ball T. Balancing empiricism and local cultural knowledge in the design of prevention research. *Journal of Urban Health: Bulletin of the New York Academy of Medicine*. 2005; 82(2;3):iii44–iii55. [PubMed: 15933330]
- Fisher PA, Ball TJ. Tribal participatory research: Mechanisms of a collaborative model. *American Journal of Community Psychology*. 2003; 32(3–4):207–216. [PubMed: 14703257]
- Forcehimes A, Venner K, Bogenschutz M, Foley K, Davis M, Houck J, et al. American Indian methamphetamine and other drug use in the Southwestern United States. *Cultural Diversity and Ethnic Minority Psychology*. 2011; 17(4):366–376. [PubMed: 21988577]
- Friese, S. ATLAS.ti 6: User guide and reference. Berlin: ATLAS.ti Scientific Software Development GmbH; 2011.
- Golub A, Johnson BD. Variation in youthful risks of progression from alcohol and tobacco to marijuana and to hard drugs across generations. *American Journal of Public Health*. 2001; 91(2):225–232. [PubMed: 11211630]
- Gone JP, Calf Looking PE. American Indian culture as substance abuse treatment: Pursuing evidence for a local intervention. *Journal of Psychoactive Drugs*. 2011; 43(4):291–296. [PubMed: 22400459]
- Hasin D, Stinson F, Ogburn E, Grant B. Prevalence, correlates, disability, and comorbidity of DSM-IV alcohol abuse and dependence in the United States: Results from the national epidemiologic survey on alcohol and related conditions. *archives of General Psychiatry*. 2007; 64(7):830–842. [PubMed: 17606817]
- Hawkins EH, Cummins LH, Marlatt GA. Preventing substance abuse in American Indian and Alaska native youth: promising strategies for healthier communities. *Psychol Bull*. 2004; 130(2):304–323. [PubMed: 14979774]
- Indian Health Service. Facts on Indian health disparities. 2006
- Indian Health Service. Indian Health Service: A quick look. 2010. Retrieved October 3, 2012, from <http://www.ihs.gov/PublicAffairs/IHSBrochure/QuickLook09.asp>
- Indian Health Service. IHS fact sheets: Indian health disparities. 2011. Retrieved October 5, 2012, from <http://www.ihs.gov/PublicAffairs/IHSBrochure/Disparities.asp>
- Indian Health Service. Fact sheets: Indian health disparities. 2013. Retrieved January 24, 2013, from http://www.ihs.gov/factsheets/index.cfm?module=dsp_fact_disparities
- Israel, BA.; Schulz, AJ.; Parker, EA.; Becker, AB. Community-based participatory research: Engaging communities as partners in health research. Paper presented at the Community-Campus Partnerships for Health's 4th Annual Conference; Washington, DC. 2000 Apr 29.
- Lucero E. From tradition to evidence: Decolonization of the evidence-based practice system. *Journal of Psychoactive Drugs*. 2011; 43(4):319–324. [PubMed: 22400463]
- Mail PD, Hawkins EH, Radin SM, Goines MA. Insights from urban Indian teens on staying healthy: Data from focus groups. *American Journal of Health Studies*. 2006; 20:99–105.
- Marmot M. Social determinants of health inequalities. *Lancet*. 2005; 365:1099–1104. [PubMed: 15781105]
- McCubbin, HI.; Thompson, EA.; Thompson, AI.; Fromer, JE. Resiliency in Native American and immigrant families. Vol. 2. Madison, Wisconsin: University of Wisconsin; 1998.
- Miles, MB.; Huberman, AM. *Qualitative data analysis: An expanded sourcebook*. 2. Thousand Oaks, CA: Sage; 1994.
- Minkler, M.; Hancock, TS., et al. Community-driven asset identification and issue selection. In: Minkler, M.; Wallerstein, N., editors. *Community-Based Participatory Research for Health: From Process to Outcomes*. 2. San Francisco, CA: Jossey-Bass; 2008. p. 153–169.

- Mohatt G, Rasmus S, Thomas L, Allen J, Hazel K, Hensel C. "Tied together like a woven hat:" Protective pathways to Alaska Native sobriety. *Harm Reduction Journal*. 2004; 1(1):10. [PubMed: 15548331]
- Momper SL, Delva J, Reed BG. OxyContin abuse on a Reservation: Qualitative reports by American Indians in Talking Circles. *Substance Use and Misuse*. 2009 in press.
- Momper SL, Delva J, Reed BG. OxyContin abuse on a reservation: Qualitative reports by American Indians in talking circles. *Substance Use and Misuse*. 2011; 46(11):1372–1379. [PubMed: 21810072]
- Novins DK, Indian Adolescent BA. Substance use: The hazards for progression for adolescents ages 14 to 20. *Journal of the American Academy of Child and Adolescent Psychiatry*. 2004; 43:316–324. [PubMed: 15076265]
- Office of Applied Studies. The DASIS report: American Indian/Alaska Native Treatment Admissions in Rural & Urban Areas 2000. Substance Abuse and Mental Health Services Administration; 2003.
- Office of Applied Studies. The National Survey on Drug Use and Health (NSDUH): Substance use and substance use disorders among American Indians and Alaska Natives. Substance Abuse and Mental Health Services Administration; 2007a.
- Office of Applied Studies. National Survey on Drug Use and Health: Substance Use and Substance Use Disorders among American Indians and Alaska Natives. Substance Abuse and Mental Health Services Administration; 2007b.
- Office of Inspector General. Indian alcohol and substance abuse: Legislative intent and reality. 1992.
- Rosenstock, L.; Hernandez, L.; Gebbie, K., editors. Who will keep the public healthy? Educating public health professionals for the 21st century. Washington, DC: National Academies Press; 2003.
- Spicer P, Beals J, Mitchell CM, Croy CD, Novins DK, Moore L, et al. The prevalence of DSM-III-R alcohol dependence in two American Indian populations. *Alcoholism: Clinical and Experimental Research*. 2003; 27(11):1785–1797.
- Strickland CJ. Conducting focus groups cross-culturally: Experiences with Pacific Northwest Indian people. *Public Health Nursing*. 1999; 16(3):190–197. [PubMed: 10388336]
- Thomas L, Rosa C, Forcehimes A, Donovan D. Research partnerships between academic institutions and American Indian and Alaska Native tribes and organizations: Effective strategies and lessons learned in a multisite CTN study. *American Journal of Drug and Alcohol Abuse*. 2011; 37:333–338. [PubMed: 21854275]
- Thomas LR, Donovan DM, Sigo RLW. Identifying community needs and resources in a Native community: A research partnership in the Pacific Northwest. *International Journal of Mental Health and Addiction*. 2010; 8(2):363–373.
- Thomas LR, Donovan DM, Sigo RLW, Austin L, Marlatt GA. The Suquamish Tribe. The community pulling together: A Tribal community-university partnership project to reduce substance abuse and promote good health in a reservation Tribal community. *Journal of Ethnicity in Substance Abuse*. 2009; 8(3):283. [PubMed: 20157631]
- U. S. Census Bureau. The American Community – American Indians and Alaska Natives: 2004. Washington, DC: US Department of Commerce; 2007.
- US Census Bureau. Profile American: Facts for Features. American Indian and Alaska Native Heritage Month: November 2011. Washington, DC: 2011.
- Walters KL, Simoni JM, Evans-Campbell T. Substance use among American Indians and Alaska natives: incorporating culture in an "indigenist" stress-coping paradigm. *Public Health Reports*. 2002; 117(Suppl 1):S104–117. *Public Health Reports*, 117 Supplement 1, S104–117. [PubMed: 12435834]
- Washington State Division of Alcohol and Substance Abuse. Tobacco, alcohol, and other drug abuse trends in Washington State: 2005 report. Olympia: Washington State Department of Social and Health Services; 2005.
- Whitbeck LB, Yu M, Johnson KD, Hoyt DR, Walls ML. Diagnostic prevalence rates from early to mid-adolescence among indigenous adolescents: First results from a longitudinal study. *Journal of the American Academy of Child and Adolescent Psychiatry*. 2008; 47(8):890–900. [PubMed: 18596558]

- Whitesell NR, Beals J, Crow CB, Mitchell CM, Novins DK. Epidemiology and etiology of substance use among American Indians and Alaska Natives: Risk, protection, and implications for prevention. *American Journal of Drug and Alcohol Abuse*. 2012; 38(5):376–382. [PubMed: 22931069]
- Whitesell NR, Beals J, Mitchell CM, Spicer P, Novins DK, Manson SM, et al. Disparities in drug use and disorder: Comparison of two American Indian reservation communities and a national sample. *American Journal of Orthopsychiatry*. 2007; 77(1):131–141. [PubMed: 17352594]

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Table 1**Interview and Focus Group Questions**

First, we would like to hear about your community.

- Would you tell me a little bit about [your Tribal/your Native/the (specific name)] community, please?
(Follow-up questions: Is it a small or large community, spread out or tight-knit? Are there special community events or activities that happen each year or on another regular basis?)
- Would you describe your relationship with [your Tribal/your Native/the (specific name)] community, please?
(Follow-up questions: How engaged with [your Tribal/your Native/the (specific name)] community are you? How often do you interact with the community or participate in community activities?)

Next, please tell us what you know about substance use and chemical dependency in [your Tribal/your Native/the (specific name)] community (i.e., prevalence):

- What substances (including alcohol) or drugs are of the biggest concern right now in your community?
(Follow-up questions: Is methamphetamine a concern in your community? How common is meth use and is it a bigger or smaller concern than other substances? What changes or trends have you noticed in abused substances? How do you believe individuals access those substances?)

We would also like to ask you about how the substances you've talked about affect [your Tribal/your Native/the (specific name)] community (i.e., impact):

- Please tell us what you know about who is most affected by substance use and chemical dependency in your community, and what are the consequences for all people?
(Follow-up questions: How does substance use or chemical dependency affect the individual who is using the substance? How does it affect the overall community? How does it affect the individual's family members or friends? Are the harms/challenges different with different types of substances?)

And, please tell us why you think people abuse drugs and alcohol.

- Please tell us why you think people in this community abuse drugs and alcohol.

Next, we would like to ask you about what [your Tribal/your Native/the (specific name)] community does to prevent substance abuse (i.e., prevention):

- *Please tell us what you know about what is currently working well in your community that helps to prevent substance use and chemical dependency, including community strengths and resources.* (emphasize strengths and resources)
(Follow-up questions: What aspects of the community support recovery? How do families support recovery? What strategies are most effective? What changes would you like to see in these prevention strategies?)

We would also like to learn about the availability and effectiveness of substance or chemical dependency treatment in your community (i.e., treatment availability and effectiveness):

- Please tell us what you know about the available treatment options for substance use or chemical dependency in your community.
(Follow-up questions: What is most effective in treatment? How do people recover from substance use or chemical dependency without treatment? How do people in your community access treatment? Are there any changes in those programs that would improve treatment? What do you think could be done to increase access to treatment for your community members?)

We also think it is important to ask you about how [your Tribal/your Native/the (specific name)] community's culture helps prevention of or treatment for substance or chemical dependency (i.e., culture):

- Please tell us what you know about the role that your community's culture (values, beliefs, traditions) plays in prevention or in helping individuals who are in treatment.
(Follow-up questions: What role do subsistence activities have in prevention, care, and treatment? Are there traditional healing practices that you believe would help prevention or treatment, at an individual or community level?)

Finally, is there any other information that you would like to share?

Table 2

Additional Interview Questions for Four Interviewees in Treatment and/or Recovery

We would also like to hear about your own experiences and perspectives on substance abuse/chemical dependency treatment, and your path to recovery:

*** Please note (and inform the interviewee) that some of the following questions might not be relevant for him/her, as some persons might be in treatment and would not consider themselves in "recovery," and some persons might be in recovery without having received treatment. ***

- Please tell us what helped you to enter or begin treatment.
(Follow-up questions: What personal strengths or resources helped you to decide to enter treatment? Did someone or something help or encourage you? Was there an important event?)
 - Please tell us what barriers you encountered that made it more difficult to enter or begin treatment.
(Follow-up questions: What personal barriers made it more difficult to enter or begin treatment? Was treatment accessible/available? Did someone or something make it more difficult to begin?)
 - Please tell us what is/was most and least helpful for you during treatment.
(Follow-up questions: *What personal characteristics were most or least helpful for you during treatment? What aspects of treatment are most or least helpful? What aspects of life during treatment are most or least helpful?*)
 - Please tell us whether there was a "turning point" either before or during treatment that helped you on your path to recovery.
(Follow-up questions: Was there a significant event or time that you remember that changed the way you thought, felt, or acted?)
 - Please tell us what is/was most and least helpful for you after treatment and during recovery.
(Follow-up questions: What personal characteristics are/were most and least helpful for you *after* treatment and during recovery? Are there people, programs, or activities that you value and attend? What aspects of life are most or least helpful?)
-

Table 3

Data Collection by Community

Community	# of Participants	# of Interviews	# of Focus Groups
A	40	15	6
B	40	9	4
C	32	15	3
D	41	4	6

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Table 4

Primary Code Categories

Code/Category Name	Brief Description
Community	Information about the participating community
Concern	Primary concerns shared by participants
Culture	Information about the Tribe's culture
Drug	Information about drug access, availability, or trends
Harm	Harms or impacts of SUAD
Important/Need	Existing or needed elements for SUAD interventions or overall wellness
Prevention	Existing prevention activities, efforts, or services
Strength	Any and all strengths (primarily community, culture, prevention, treatment)
Treatment/Recovery	Existing treatment/recovery activities, efforts, or services
Use/Why	Reasons/ideas reported for why people use/abuse alcohol and other drugs

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Table 5

Category/Sub-Code Example: Prevention

Code/Category Name	Brief Description
Challenge	Existing prevention efforts are not effective or are insufficient
Clinic classes	Tribal Treatment clinic classes are preventive
Community support	Community support is preventive
Culture/traditions	Culture and traditions are preventive
Education	Prevention education exists in the community
Employment support	Vocational and employment opportunities are preventive
Families	Families are preventive
Other	Other prevention that does not fit existing codes
Role models/mentors	Positive role models/peers are preventive
Schools	Prevention exists in schools
Sports	Sports and community sporting events are preventive
Youth	Youth program is preventive or needs improvement

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