Effective Substance Abuse Treatment for
Native American Patients

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Abstract

Purpose: The purpose of this article is to give nurse practitioners (NP) insight into health and wellness and substance abuse treatment options that are culturally sensitive and meet the needs of American Indian/Alaska Native clients.

Data sources: A literature review of PubMed, CINAHL, and PsycINFO databases using the following search terms: Native American, Alaska Native, First Nations, aboriginal, substance abuse, treatment modalities, therapeutic modalities, substance abuse, methamphetamine abuse, alcoholism, chemical dependency, Native American wellness, Native American spirituality and medicine wheel. English language sources from 2005-2009 and studies of treatment programs for adolescents and adults were included.

Conclusions: Treatment programs for AI/AN people can be classified as evidence-based, culturally sensitive or integrated. Participatory Action Research has been used to effectively identify culture-specific treatment outcomes and incorporate Native American Wellness models such as the Medicine Wheel and traditional practices into treatment program designs.

Implications for practice: It is not possible to generalize a single American Indian/Alaska Native viewpoint of health, however American Indian/Alaska Native definitions of health and wellness differ from mainstream disease models. This paper provides direction to NPs to make referrals to culturally sensitive treatment programs that meet the specific needs of AI/AN clients.
Introduction

Many nurse practitioners (NPs) working in both rural and urban settings will treat American Indian/Alaska Natives (AI/AN). The likelihood that substance abuse will present as a primary or secondary health concern is disproportionately high among this population of patients. While less than 1 in 10 (9%) of the general U.S. population over the age of 12 were classified with substance dependence or abuse in the past year, the most recent data show a rate of 1 in 8 (13%) of the AI/AN population (SAMHSA, 2009).

NP's may first become aware of substance abuse problems among ethnically and culturally diverse populations during clinical rotations or working on research projects with faculty. The need for culturally relevant treatment methods with well documented effectiveness is apparent from the percentage of failed treatments among this population. Indian Health Service statistics for abstinence six months after inpatient treatment in one study (n=451) were only 50% (SAMHSA, 2007). The purpose of this article is to give the non-Native NP insight into the AI/AN viewpoint of health and wellness by examining AI/AN wellness constructs and substance abuse treatment options. The views presented are not intended to propose one AI/AN view, but common themes emerging from a recent literature search. Native American Wellness will be examined along with how this concept can be identified in treatment programs.

Native American Wellness

The solution to providing successful treatment does not lie in simply cloaking Western disease-prevention models of therapy to make them more “acceptable” to AI/AN clients. Recent articles by AI/AN researchers suggest that the very definitions of health and treatment outcomes need to be redefined when working with AI/AN people (Limb, 2008). Prevention and treatment programs based on information and socialization techniques from the majority culture are often
perceived by AI/AN's as continuing forced assimilation by imposing majority values and family systems (Walters & Simoni, 2009; Whitbeck, 2006).

Most researchers agree that new treatment models are needed based on an indigenous knowledge foundation (Hodge, Limb, & Cross, 2009; Walls, Johnson, Whitbeck, & Hoyt, 2006). The Native American Wellness construct proposed by Alvarado (2009) is a multidisciplinary framework drawing on concepts from three theories which have been developed and studied by researchers in AI/AN communities: Native American Postcolonial Psychology theory (Duran & Duran, 1995), Historical Trauma theory (Brave Heart & DeBruyn, 1998), and the Medicine Wheel or Sacred Circle (Cross, 1998; Weaver, 2002).

Native American Postcolonial Psychology theory attributes recent problems in AI/AN communities to the forced acculturation by European Americans that caused cultural extermination and imposed European values and socialization (Whitbeck, 2006). AI/AN children forced to attend boarding schools produced a generation of adults separated from natural intergenerational transmission of parenting skills and indigenous language, culture and ceremony (Gone, 2009). This is thought to be at the root of substance abuse and dysfunction affecting several generations. Whitbeck (2006) proposed that AI/AN cultures contain the necessary knowledge and unique developmental risk and protective factors to socialize mentally healthy, alcohol- and drug-free children.

Historical Trauma theory (Brave Heart & DeBruyn, 1998) explains the intergenerational transmission of trauma and grief caused by the loss of lives, land and culture as a result of European colonization as the source of pathological posttraumatic stress disorder among AI/AN people (Gone, 2009). This historical unresolved grief or "soul wound" manifests as complicated bereavement and PTSD. AI/AN people are at greater risk for experiencing current traumatic
events such as sexual abuse, child abuse, suicide, homicide, domestic violence and alcoholism. Addictive substances are used to give temporary relief from the pain of shame and a way to release suppressed anger, with destructive effects on the family (Morgan & Freeman, 2009).

The Medicine Wheel shown in Figure 1 is a concept central to the culture of many AI/AN Nations. The four spokes of the Wheel lead to the Creator, the center of life. The circular pattern of understanding life is evident in nature (Montour, 2000). The four quadrants represent four sacred directions and have layers of symbology that varies between tribes. They have been described as four colors (usually red, black, yellow and white); directions or winds (north, south, east, west); seasons; races of people; four powers apparent during the four stages of life (infancy, childhood, adulthood, old age); individual aspects or roles in the community. Many professionals working with AI/AN people have found that spirituality must be integrated into treatment processes to provide culturally competent care (Yurkovich & Lattergrass, 2008; Limb & Hodge, 2008; Stone, Whitbeck, Chien, Johnson, & Olson, 2006; Gray et al., 2008; Weaver, 2002).

These three theories can be integrated to provide a holistic definition of Native American Wellness based on five aspects of "Wellbeing": physical; psychological; spiritual; emotional; and cultural (historical trauma) (Alvarado, 2009). Weaver (2002), a pioneer researcher in the AI/AN community observed that AI/AN's define health differently than the dominant culture view of wellness as the absence of disease. AI/AN's see wellness as a circular pattern of balance, wholeness and integrity, like the harmony of the Medicine Wheel. Illness is the result of imbalance caused by factors such as substance abuse or loss of traditions (Montour, 2000). The individual's relationship to family and community also must be in balance, and their support system included in any type of therapeutic intervention (Weaver, 2002).
Misconceptions Hinder Diagnosis and Treatment

In addition to recognizing the need for indigenous models for substance abuse treatment, misconceptions among non-AI/AN providers and the public may hinder assessment and need to be corrected. A common misconception is that all AI/AN’s have free or low-cost access to tribally-run Indian Health Services (IHS) programs (SAMSHA, 2009). Only forty percent of all AI/AN substance treatment facilities are located in urban areas but 61% of the AI/AN population now live in urban areas. Fifty-five percent of the AI/AN population receive health care at Indian Health Service (IHS) or tribally operated clinics, and nearly 50% rely on publicly or privately funded treatment services (Castor, 2006). The National Survey of Substance Abuse Treatment Services found that most facilities operated by tribal entities only offered outpatient services (SAMHSA, 2009).

Another misconception among non-AI/AN NPs is that the types of substances abused are similar across ethnic groups. The National Survey on Drug Use and Health (SAMHSA, 2007) found that from 2002-2005 AI/AN people were more likely than members of other racial groups to report past year alcohol use disorders (10.7% vs. 7.6%) and to report past year illicit drug use disorders (5.0% vs. 2.9%). Rates of past year marijuana, cocaine, and hallucinogen use disorders were also higher among AI/AN people than members of other racial groups. Table 1 shows the Substance Abuse Type by Race for those entering treatment for substance use disorders (SUD) in 2007 (SAMHSA, 2007). Usage patterns showed variation between tribes. Alaska Natives reported twice the rate of methamphetamine abuse of American Indians (18.5% vs. 9.0%), who were similar to the rate of White (non-Hispanic) clients (8.5%) in 2007 (SAMHSA, 2007).

If SUD is not the presenting problem for which the patient seeks medical services it will often go unrecognized. SUD is often the primary causative factor in related health problems such
as cardiac, hepatic or gastrointestinal disorders. Many AI/AN people show a pattern of abstinent periods interspersed with episodic binge drinking or drug use (Whitesell, 2006). This pattern might lead the NP to believe that the patient is no longer using drugs or alcohol. Many non-AI/AN NPs are reluctant to discuss SUD's among AI/AN's, but it one study showed that clients who were recommended for treatment were more likely to complete programs (Walls, Johnson, Whitbeck, & Hoyt, 2006).

Related Health Problems

The outcome of untreated substance abuse contributes to pervasive health disparities among AI/AN's compared to the U.S. population overall. There is a six times greater rate of liver disease among AI/AN people than for European Americans, and a 133% higher rate of accidental death/injury (Stone, 2006). The alcohol-attributable death rate is 11.7% for AN/AI, nearly twice that of the general U.S. population (Centers for Disease Control & Prevention, 2008). Nearly 1 in 4 AI/AN’s report a long-lasting physical or mental disability, as compared to 1 in 5 of the general population. Poor birth outcomes and risk factors such as prematurity related to smoking or alcohol consumption during pregnancy are 3 times higher (Castor, 2006). The prevalence rates of many health problems in this population are believed to be higher due to underreporting of AI/AN identity (Pukka, Stehr-Green, & Becker, 2005).

Urban Indian health organizations (UIHO) funded by contracts and grants from IHS have made progress toward reducing these disparities by providing access to health care for AI/AN's who do not live on reservation. Health improvements among AI/AN women who received prenatal care at UIHOs were noted in the percentages of low birthweight AI/AN infants and infant mortality, which were lower than the percentages of all mothers combined in the general U.S. population. The UIHO AI/AN population showed decreased mortality rates compared to all
other AI/AN's combined (Castor, 2006). UIHO's have also made significant contributions in diabetes teaching and prevention, lowering tuberculosis rates and overall health improvements among AI/AN's over the last 20 years (Kunitz, 2008).

Primary care providers need to understand factors contributing to AI/AN health and patterns of substance abuse in order to adequately diagnose and make effective treatment referrals. The literature review that follows examines the prevalence of SUD and several studies of genetic heritability done with this population. It will also describe the constituents of culturally sensitive, accessible substance abuse treatment programs for AI/AN.

Literature Review

Prevalence

This search was undertaken to identify literature on prevalence and treatment modalities currently being used to address substance abuse in the AI/AN community for a grant proposal to utilize contingency management treatment in tribal methamphetamine treatment programs in Montana and Washington State. Prevalence statistics of meth abuse among AI/AN's entering treatment in the U.S. was isolated as shown in Table 2 (SAMSHA, 2009). Results indicated that AI/AN's sought treatment for meth use as their primary substance of abuse at a rate comparable to Whites (8.8% vs. 8.7%). Among AN's, 27.9% and 38.8% of AI's compared to 25.9% of Whites (non-Hispanic) reported alcohol as the only reason to seek treatment. These findings led to the inclusion of articles dealing with treatment modalities for AI/AN's related to all substances of abuse.

Data Sources

PubMed, CINAHL, and PsycINFO databases were searched using the following MeSH terms and key words: Native American; First Nations; Alaska Native; American Indian;
aboriginal; substance abuse; treatment modalities; therapeutic modalities; substance abuse prevention; methamphetamine abuse; alcoholism; chemical dependency; Native American Wellness Model; Native American spirituality; heritability of SUD and medicine wheel.

Data were included from the following websites: Substance Abuse and Mental Health Services Administration (SAMHSA) Treatment Episode Data Set (TEDS) and The Colorado School of Public Health Centers for American Indian and Alaska Native Health.

Study Selection

The full texts of 150 articles were reviewed to isolate 45 articles related to Native American wellness content and substance abuse treatment programs serving adolescent and adult AI/AN's. The search was limited to English papers published between January 2005 and December 2009, which produced 40 articles. An additional five articles were included from the Journal of Psychoactive Drugs, Volume 35, Number 2 (2003), an issue dedicated to treatment of chemical dependency in AI/AN's.

Heritability Studies

Substance dependence was found to have a heritable component in Southwest California/Mission Indians (SWC), but the specific genetic factors and encoding genes have not been fully identified (Ehlers, Phillips, Gizer, Gilder & Wilhelmsen, 2010; Wilhelmsen & Ehlers, 2005). Researchers have conducted heritability studies on well-defined populations such as AN/AI because they are more environmentally and genetically homogenous than the general population and have extended pedigrees (Wilhelmsen & Ehlers, 2005; Radel et al., 2005).

A correlation between increases in spectral power of EEG testing and marijuana and alcohol dependence was demonstrated among both genders \( n = 626 \) in an AI community (Ehlers et al., 2010). Phenotypic studies of 41 AI/AN families with large pedigrees on eight
contiguous SWC reservations demonstrated moderate frequency of genetic heritability of marijuana (0.38), alcohol (0.29) and stimulant (0.25) dependencies. 885 individuals were analyzed for dependence symptom clusters based on DSM-III-R and ICD-10 criteria, and four categories of severity. Those who exhibited withdrawal symptoms when not drinking showed the highest heritability estimate (0.71) (Wilhelmsen & Ehlers, 2005).

Studies at the National Institute of Health in Maryland have specifically focused on the chromosome 4 cluster of GABA(A) receptor genes which have been linked to alcoholism. Genotypes of Southwestern Al (n =433) were compared to a Finnish sample (n=511) with both alcohol-dependent and unaffected individuals. 5q34 GABA(A) receptor genes were linked to alcohol dependence in both populations (Vallejo et al., 2005). These findings were validated in a study with Plains Indian men and women and a Finnish sample, but the exact haplotype responsible for heritability was not determined (Enoch et al., 2009).

Researchers have isolated an ALDH2 variant enzyme which has been shown to have protective effects in other populations due to its effects on alcohol metabolism. This protective enzyme has not been found in Al/ANs which might explain the higher prevalence of alcohol use disorders in this group. Among the SWC communities studied, those who carried a variant allele (ADH1B*3) were one-third less likely to have a lifetime diagnosis of alcoholism (Ehlers, 2007).

Programs and Modalities Without Specific Cultural Components

The current model of treatment on reservations has been referral to residential treatment far from the client's home community for 3-6 week programs. Relapse rates were found to be 35% to 85% (Jiwa, Kelly, & Pierre-Hansen, 2008). The poor success rate of many of these programs has been attributed to the lack of family and community support systems, and the fact that many programs have not allowed AI/AN people to define and integrate theoretical and
cultural frameworks into the treatment plan (Chino & DeBruyn, 2006). The short duration of these programs might also be a factor in treatment failure.

Studies of preferences among AI/AN people for models of substance abuse treatment indicated that 42% utilized traditional sources such as tribal healers; 50% utilized biomedical services and 39% attended 12-step meetings (Beals et al., 2006). The Healing Pathways Project, a study of preferences for mental health and substance abuse services among AI's in two Midwestern states and Canada found higher perceived effectiveness rates for informal/traditional services offered on the reservation than for formal off-reservation services. Service utilization was higher for both formal and informal on-reservation services. Female gender, multi-ethnicity higher education levels, and employment status were found to be the highest predictors of utilization of both types of programs in AI/ANs (Walls et al., 2006).

Villanueva recognized that the lack of substance abuse treatment methods with well-documented efficacy for AI's was one of the nation's clearest unaddressed health disparities. His 2007 Project MATCH study randomized 25 AI/AN clients with substance use disorder to three treatment modalities: Motivational Enhancement Therapy (MET), Cognitive Behavioral Therapy (CBT) and Twelve-Step Facilitation (TSF). Clients were interviewed at intake and at 3-month intervals for up to 12 months after treatment. Those clients in the MET group were 33% more likely to have decreased drinking intensity and a higher number of abstinent days than clients treated with CET or TSF (Villanueva, Tonigan, & Miller, 2007). The findings of this study are limited by small sample size.

Cognitive behavior therapy and contingency management (CM) programs have demonstrated success with cocaine and meth addiction in non-Native studies (Roll, 2006). Rewards for drug-free urine samples with vouchers for goods or services act as positive
reinforcers. The use of CM in tribal drug courts and treatment programs run by IHS has been shown to increase client engagement in the therapeutic process and research is being conducted on the effectiveness of CM with AI/AN populations (Myers, Masis, & Roll, 2007).

Intrinsic motivation to change using Prochaska and DiClemente's Transtheoretical Model's stages of readiness were studied in AI/AN youth (n=89). Extrinsic motivation was measured as pressure exerted by criminal justice authorities and family. Older age (16-18), higher scores on a scale that measured treatment readiness and scoring higher on concerns about legal problems were found to be three factors in treatment success (Fickenscher, Novins, & Beals, 2006).

Gone (2009) stated a need to reconcile evidence-based treatment and culturally sensitive therapies. Established evidence-based treatments need to be evaluated for their relevance to minority populations in order to provide an empirical basis for future studies of culturally sensitive therapies.

**Culturally Sensitive Programs**

The literature is full of examples of treatment programs that have successfully integrated AI/AN worldviews, cultural traditions and some aspects of evidence-based treatment methods. Examples range in focus from the individual disease model of Twelve-Step programs with a Native definition of illness, to community-based participatory programs with sociocultural-spiritual models (Jiwa, Kelly, & Pierre-Hansen, 2008).

The Teen Intervention Project - Cherokee was a 10-week on-reservation service for 108 AI adolescents of both genders based on Social Learning Theory (Bandura, 1977) and Problem Behavior Theory (Jessor & Jessor, 1977). Substance use is linked to developmental processes, environmental influences, lack of cultural values, and stressors of negotiating traditional and
contemporary cultures. This program integrated traditional AI/AN ceremonies, with a focus on education, social influences and self-reliance enhancement as factors in abstinence from substance abuse. Substance use immediate-after and 90-day-after treatment scores were significantly lower (p < .001) (Lowe, 2006).

Gossage (2003) found that attendance at sweat lodge ceremonies in treatment programs decreased alcohol consumption among 190 incarcerated male AI/AN's after release. Treatment programs for AN's obtained Medicaid reimbursement for writing traditional healing modalities into individual treatment plans as art and exercise therapy. These activities included hunting/fishing, berry picking, feasting (potlatches), tundra walks, steambaths, gathering edible and medicinal plants and traditional arts/craft (Mills, 2003). An advisory board of community members with cultural knowledge and talents were recruited to teach creative expression via traditional art, poetry, story- telling, crafts, music and dance for the wellness component of a substance abuse prevention program for AI/AN youth (Gray et al., 2008). Treatment outcomes were not measured for either of these programs.

"Cultural tailoring" of programs from an emic (or insider) AI/AN perspective has been shown to increase receptivity to treatment (Ringwalt & Bliss, 2006; Allen et al., 2006; Fickenscher, Novins, & Beals, 2006; Mills, 2003; Gossage, 2003). Participatory Action Research using quantitative survey methods were used to identify community, family and individual "protective factors" within the Yup'ik culture as tools to design a prevention program for AN adolescents. The qualitative responses of 51 tribal members in three sobriety categories (lifetime abstainers, nonproblem drinkers and more than five years abstinence) were coded to develop a heuristic model of protective factors. Each factor was then tested on 127 adults for internal validity with a combined reliability score of .81 (Allen et al., 2006). Ringwalt (2006) identified
culture-specific values such as reverence for family/ancestors, connectedness and cooperation, and stressed the importance of using the idioms, phraseology and language of the target population.

The specific mechanisms by which traditional culture affects alcohol cessation were studied on four AI reservations and five Canadian First Nation reserves. Measures of enculturation were identified based on participation in traditional activities, identification with AI culture and traditional spirituality. The degree of individual enculturation measured by participation in pow-wow activities, knowledge and use of the tribal language and involvement in 19 types of traditional activities was shown to be a significant predictor of alcohol cessation. Participation in traditional spiritual activities was found to be an important factor in sobriety maintenance (Stone et al., 2006). Incorporating "sings" and talking circles into the medical model was identified as one method of preserving cultural spirituality in the treatment process (Walls et al., 2006).

A Canadian study of 19 First Nations staff and clients in a reservation-based substance-abuse treatment program over a 7-week period found a need to address personal "pain" by reconceptualizing one's life and experience in the context of AI/AN historical trauma (Gone, 2009, p. 756). Acculturative stress related to the rapid cultural and climate changes in the Arctic was found to be a factor in the high rate of substance use and suicide based on a literature review of 34 studies involving research done with AN youth to identify possible causal factors (Lehti, Niemela, Hoven, Mandeli, & Sourander, 2009). One program in Alaska incorporated the "talking circle" as a treatment tool. Prayers and the assistance of each individual's "spirit helpers" were invoked to facilitate the therapeutic process (Morgan & Freeman, 2009).
Methamphetamine abuse has become an established problem in AI/AN communities. It was the leading drug problem on rural reservations in 2005 (Dreisbach, Hickler, & Koester, 2006). Indian Health Service data from 1997 to 2004 showed that the number of visits related to methamphetamine use in its Los Angeles facility rose from 136 to 4,046 (Spear, Crevecoeur, Rawson, & Clark, 2007). AI methamphetamine users studied in California were younger and often disabled due to mental impairment. It is unclear whether the subjects were using other illicit drugs in addition to meth. 31.9% of them were homeless, compared to 23.5% of their non-Native peers (Evans, Spear, Huang, & Hser, 2006). It should be noted that statistics from 2005 to 2007 showed a decrease of 1-2% in meth use by AI/AN people entering treatment (SAMHSA, 2007).

Many AI/AN leaders have turned to non-Native approaches to methamphetamine treatment that incorporate culture-specific resources. The Matrix Model created by the Matrix Institute of Los Angeles has integrated resources from the White Bison Firestarters Wellbriety Circle to introduce Native culture and spirituality. Left brain analytical thinking is often damaged by meth, but it is believed that story-telling, drumming, prayer and ceremonies access right brain thinking (Coyhis & Simonelli, 2007). More research is needed to determine the effectiveness of this method.

Urban Treatment Programs

Treatment programs for AI/AN's living in urban areas have reported additional difficulties due to limited funding for services. Although 61% of AI/AN's in the U.S. live off-reservation, only 1% of IHS funding is spent on urban chemical dependency programs (McFarland, Gabriel, Bigelow, & Walker, 2006). One of many non-IHS private agencies addressing this need is Friendship House in San Francisco, CA. This residential and outpatient
program has been the site of many studies because the highest concentration of urban AI/AN people in the U.S. is located in the San Francisco and Oakland, CA area. A federal relocation program in the 1950-1960's brought together many AI/AN's from multiple tribes and caused isolation from tribal practices and social support (Nebelkopf & King, 2003). Urban programs attempting to address this problem also face working with high rates of homeless AI/AN's with chemical dependency (Lobo & Vaughan, 2003) and higher percentages of AI/AN's who are HIV positive (Nebelkopf & Penagos, 2005).

Friendship House in San Francisco is a residential and outpatient program incorporating five treatment modalities: (a) The Red Road to Recovery; (b) Individual and group counseling; (c) Codependency group work; (d) Alcohol, drug and HIV education, and (e) AA/NA 12-Step meetings. The Red Road, a treatment model developed by Gene Thin Elk (1993) is a cultural approach that uses AI/AN symbols and metaphors for leading a balanced, sober lifestyle. Domestic violence issues for women are also addressed at Friendship House, as these often coexist with SUD (Nebelkopf & King, 2003).

Nebelkopf & Penagos (2005) surveyed 45 mostly male (87%) clients at Friendship House on admission, 3 months and 1 year post-treatment on a survey measuring Quality of Life factors including sobriety, stability of living conditions, employment and health status. The majority of clients reported life improvements after treatment. Similar findings were replicated in urban Veteran's Administration treatment programs with AI/AN veterans, but posttraumatic symptoms continued in both male and female patients after treatment. AI/AN women were also found to be more likely to avoid VA settings for treatment (Westermeyer et al., 2009).

The challenge to non-Native providers working with AI/AN populations includes not only difficulty recognizing the role substance abuse plays in the myriad of health disparities
among AI/AN people but referring them to effective programs (Castor, 2006). Effective referral means finding culturally relevant programs that incorporate the Native American Wellness constructs of balance, harmony and spirituality.

Conclusions

Substance abuse often presents as a primary or secondary concern when working with AI/AN patients. Patterns and prevalence of drug and alcohol use differ by tribe and location (Jiwa et al., 2008, p. 1000.e5). Large health disparities exist between AI/AN people and other ethnic groups in the U.S. that lead to higher morbidity and mortality. Most IHS funding goes to services located on reservations, but most inpatient programs are located in urban areas. Many AI/AN clients living on reservations are sent to residential programs far away from home for 3- to 6-week periods. Treatment success is enhanced when patients attend treatment closer to home with family and community support. Studies also show AI/AN people prefer informal services with traditional modalities.

AI/AN perspectives of health and wellness vary by tribe, but share a holistic view based on Native American Wellness constructs (Alvarado, 2009). The interactive processes of the Medicine Wheel have been integrated into treatment programs. The inclusion of traditional healing modalities such as sweat lodges, arts/crafts, healers, talking circles and tribe-specific ceremonies encourages participation by community tribal members as speakers and resources. Successful research approaches to substance abuse include Participatory Action Research as an effective method of identifying culture-specific values and strengths for program outcome variables, and contingency management combined with traditional healing to treat methamphetamine abuse.
Urban Indian Health Organizations offering services in urban areas need to address related urban social problems such as unemployment and homelessness. HIV-positive substance users and veterans are two populations often served by these agencies. A history of forced assimilation practices have left many AI/AN people feeling caught between two cultures, and contributed to higher rates of substance abuse. Many successful SUD programs address Historical Trauma and Native American Postcolonial Psychology theories with treatment perspectives based on AI/AN values of balance, harmony and spirituality.

Implications for Practice

The implications for practice include useful tools for treating AI/AN's in clinical settings as well as addressing the need for more studies of evidence-based programs with outcome measures identified by the AI/AN community. There is no one "right" way to approach the topic of substance abuse with an AI/AN patient. Building trust and relationship are crucial for non-AI/AN providers working with this population (Christopher, Watts, McCormick, & Young, 2008). This can be accomplished by understanding the history of the tribe that the NP is working with, listening to the input of community members and being upfront about expectations and intentions. Openly discussing the problem of SUD and making recommendations for treatment have been linked to increased program completion (Walls et al., 2006).

NP's need to understand that some, but not necessarily all, AI/AN clients have a holistic concept of healing. NP's need to incorporate these concepts and not focus only on Western disease model explanations. This might involve venturing into an area that can be uncomfortable for some NP's, that of the interconnectedness of spirituality with health and wellbeing for the AI/AN patient (Limb & Hodge, 2008). Becoming familiar with the Native American Wellness
constructs such as the Medicine Wheel construct will help both the NP and the client identify how chemical dependency affects relationships to family and community (Montour, 2000). The use of assessment tools with demonstrated cross-cultural validity such as the Native American Wellness Scale (Alvarado, 2009) can also assist with more accurate screening of substance abuse and other health problems.

The IHS is a good resource for programs available locally including UIHO's. Contacting programs before referring patients can help NP's determine the extent of cultural-sensitivity and content based on Native American Wellness constructs. NPs need to investigate programs in their local area for their ability to meet the needs of AI/AN clients. This includes looking at their approach, asking AI/AN people their perception of the program and evaluating outcomes for AI/AN clients.

The American Society of Addiction Medicine (ASAM) Patient Placement Criteria offers guidelines to define biopsychosocial severity and match patients to appropriate levels of care and modalities of treatment. Evaluation by a certified chemical dependency professional might be necessary to determine an appropriate treatment option.

Finally, a wealth of literature is available for NP's who desire to become more involved in community prevention programs (Jiwa et al., 2008; Allen et al., 2006; Thurman, Plested, Edwards, Foley, & Burnside, 2003). Participatory Action Research has been widely used to help communities identify and address health disparities including substance abuse (Gray et al., 2008; Christopher, Watts, McCormick, & Young, 2008). There is also a need for more AI/AN NP's and researchers to use their own cultural backgrounds to guide the future development of programs and research.
Figure 1

The Medicine Wheel

The power of the North is the power of renewal and the quickening of the spirit.

Old Age
Winter

Infancy
Spring

Adulthood
Autumn

Childhood
Summer

The power of the East opens the spiritual eye and brings enlightenment.

The power of the West is strength and introspection, self realization and full maturity.

Table 1

Primary Substance of Abuse by Race

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<th>Substance</th>
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Table 2

Highlights for 2007 Treatment Episode Data Set (TEDS)

Admissions by gender, race/ethnicity, and age at admission, according to primary substance of abuse: TEDS 2007 Row percent distribution

[Based on administrative data reported to TEDS by all reporting States and jurisdictions. See Table 6a.]

<table>
<thead>
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<th>Gender, race/ethnicity, and age at admission</th>
<th>No. of admissions</th>
<th>Primary substance at admission</th>
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References


