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HIV/AIDS PREVENTION IN "INDIAN COUNTRY": CURRENT PRACTICE, INDIGENIST ETIOLOGY MODELS, AND POSTCOLONIAL APPROACHES TO CHANGE

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Many tribal and urban American Indians and Alaska Native communities have initiated HIV/AIDS prevention and treatment services. The richness, depth, and scope of these efforts, however, are not well known and have not been sufficiently documented in the academic literature. In this article we assess the strengths and weakness of the published literature using the constructs of the socioecological framework. We discuss the need to apply an "indigenist" etiology paradigm to HIV/AIDS risk and protection. Finally, we define and discuss the varied postcolonial approaches to HIV/AIDS prevention, treatment, and healing.

In response to the HIV/AIDS epidemic, American Indian and Alaskan Native (AIAN) tribes and urban communities have initiated prevention and treatment measures and services. Like community-based programs in all U.S. communities of color, the richness, scope and depth of these efforts are not well represented in the published academic literature.

In this paper we use a multilevel social ecological framework to review the scant HIV/AIDS etiologic and interventions research conducted among AIAN populations. We then describe gaps in the literature and suggest a research and intervention agenda applicable to all levels of the social ecological model. Because there are so few published studies available to give context and depth to this study, we have taken the approach of describing examples of postcolonial approaches to intervention and suggesting how the postcolonial approach may be useful in future research.

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A MULTILEVEL APPROACH: THE SOCIAL ECOLOGICAL FRAMEWORK

A social ecological perspective is very helpful in characterizing and evaluating the studies that do exist on HIV/AIDS among the AIAN population. The social ecological model is a useful guide for defining proximal (near) and distal (farther removed) determinants of a specific health condition of interest, in this case, HIV/AIDS and risk or protective factors. The model categorizes determinants as falling into distinct analytic levels or categories.

The first level, *intrapersonal*, refers to the most individual and immediate determinants, such as genetic predispositions, personality traits, and psychological states. Moreover, the intrapersonal level includes determinants based on individually ascribed or self-defined status of gender, sexual orientation, race, and class. The second level, *interpersonal*, refers to the interactions between individuals, couples, families, and other small groups. The *institutional* level refers to factors having to do with the culture, beliefs and practices of specific institutions such as local hospitals, clinics and multinational corporations. The institutional level may also refer to the effects of more symbolic social institutions such as marriage or general medical attitudes. Likewise, the *community* level of analysis can refer to specific community-based organizations and civic associations or to more symbolic communities such as those formed by cultural identity and political association. The *social and public policy* level deals with the highest level of national policy and regulation (such as entitlement or welfare policy) or more symbolically with nationalist or regional ideology regarding factors such as race, gender, immigration status, and employment status.

A foundational principle of social ecological theory is that health status reflects an interplay of factors at multiple levels (Choi, Yep, & Kumekawa, 1998). This theory holds that determinants at all these levels have an impact on public health. Although an individual's health status may be more easily traced to causes at the intrapersonal and interpersonal levels, these more immediate causes may in turn be traced to factors operating at the higher levels of institutions, communities, and social policy. Hence, the contemporary health promotion/disease prevention field is rich with theories of change that include not only individual educational activities but also advocacy, organizational change efforts, policy development, economic supports, environmental change, and multimethod programs (Glanz, Rimer, & Lewis, 2002). Within the AIAN community, articulating the broadest possible targets of change is a prerequisite to comprehensive HIV/AIDS prevention and treatment planning. In this paper we use the socioecological framework to organize both the etiological and interventions research on HIV/AIDS within this community and to assess gaps in the literature.

LITERATURE REVIEW OF HIV/AIDS IN INDIAN COUNTRY

The relatively low number of reported AIDS cases among AIANs belies the many factors contributing to the increased vulnerability of this population to HIV infection. First, the AIAN population is disproportionately affected by demographic, economic, and health risk factors associated with increased risk for HIV infection (Indian Health Service, 1997). Second, low levels of condom use combined with high levels of sexually transmitted diseases (STDs) place AIANs at risk for exposure to HIV infection (Blum, Harmon, Harris, Bergiesen, & Resnick, 1992). Third, AIANs have escalating rates of injection drug use (Conway et al., 1992) and are two to three times more likely than the general U.S. population to engage in excessive drinking (May et al., 1995), which often co-occurs with sexually risky behaviors (Brassard, Smeja, & Valverde, 1996; Walker et al., 1996). Moreover, studies in Canada and the United States dem-

onstrate that AIANs engage in unprotected sexual behavior and inconsistent condom use (Conway et al., 1992; Fenaughty, Fisher, MacKinnon, & Cagle, 1994; Metler, Conway, & Stehr-Green, 1991; Myers, Bullock, Calzavara, Cockerill, & Marshall, 1997), and that HIV prevalence is on the rise (Conway et al., 1992; Metler et al., 1991). However, the majority of studies conducted on AIANs so far have focused on the homeless (Rekart, 1993) and people in alcohol treatment programs (Baldwin et. al., 1999; Stevens & Estrada, 2000) or in outpatient clinics and medical offices (Diamond, Davidson, Sorvillo, & Buskin, 2001). Only a few published studies focus on community-based samples (Myers et al., 1997; Walters & Simoni, 1999; Walters, Simoni, & Harris, 2000).

One contribution to the AIAN HIV/AIDS risk factor literature comes from the National Institute on Drug Abuse (NIDA) cooperative agreement research program directed at out-of-treatment drug users with HIV prevention, initiated in the fall of 1990. By 1994, 4 of the 23 sites in that cooperative agreement (Alaska, Colorado, and two Arizona sites) had enough AIAN subject inclusion ($N = 55$) to form the NIDA Native American Supplement (Reynold, Fisher, Estrada, & Trotter, 2000). The researchers of the Native American Supplement performed both independent and cross-site analysis and advanced our knowledge of risk and protective factors as they pertain to AIANs, as well as our knowledge of the theory and methods of university/community research partnerships (Stevens & Estrada, 2000).

For instance, a NIDA Native American Supplement cross-site investigation using focus group methodology (Baldwin, 1999) found that AIAN-specific health and social agencies were good sources of AIDS information, as were ex-drug users and AIAN's living with HIV/AIDS. Drug users suggested that smaller tribes needed special educational activities and attention. Other common themes were that high-risk groups, such as youth and those in alcohol and drug treatment programs, should be targeted for culturally specific outreach and education, and that community members need to be included at every phase of prevention efforts.

INDIVIDUAL-LEVEL RISK AND PROTECTIVE FACTORS

Not surprisingly, most of the AIAN studies of HIV/AIDS have focused on knowledge, attitudes, and behaviors at the intrapersonal and interpersonal levels and a few published studies in refereed journals offer empirical data regarding AIAN and these variables (Brassard et al., 1996; Calzavara, Burchell, Myers, Bullock, Escobar, & Cockerill, 1998; Hall, Wilder, Bodenroeder, & Hess, 1990; Walters, Simoni, & Harris, 2000). The available research indicates AIANs are as knowledgeable regarding HIV as the general population (Calzavara, et al., 1998; Hall et al., 1990; Myersj, Calzavera, Cockerill, Marshall, & Bullock, 1993; 1997; Walters et al., 2000), but tend to know less about HIV transmission and more about specific clinical properties of the disease (Hall et al., 1990). One study indicated no overall difference in knowledge between AIAN men and women; however, younger respondents were more informed than older respondents about HIV transmission through blood, casual contact, kissing and indirect contact (Myers et al., 1993).

Condom Use. Increasing consistent condom use is an important target for HIV prevention in Indian Country. In one study of HIV sexual risk behaviors among off-reservation Canadian aboriginals, 61% of the 400 sexually active participants reported never using condoms (Calzavara et al., 1998). In this stratified random sample of 11 reserve communities in Ontario (87% response rate), First Nations women with two or more sexual partners were more likely than First Nations men never to use con-

doms (59% vs. 31%), whereas First Nations men with two or more partners were more likely to sometimes use condoms (57% vs. 37%; Calzavara et al., 1998). However, as Calzavara and colleagues note, the potential for STD and HIV transmission remains high given that 40% of the men had multiple sex partners, yet only 8% of them always used condoms. Additionally, multiple logistic regression revealed that Native youth under the age of 30, First Nations men, those without a long-term steady sex partner, those who had more than one sex partner, and those who were knowledgeable about HIV/AIDS were most likely to use condoms (Calzavara et al., 1998). Although condom use rates were highest among the First Nations youth, consistent condom use was reportedly rare in this age group, thus leaving Native youth vulnerable to HIV and STD exposure. Condom use was not associated with language use, familiarity with traditional ways of life, and religious faith (Calzavara et al., 1998). Consistent condom use was most likely among those who knew someone with HIV/AIDS and who were knowledgeable about HIV/AIDS (Calzavera et al., 1998). In a smaller convenience sample of 100 urban AIANs in the New York metropolitan area, among the 63% who reported sexual activity in the last 6 months, 73% reported engaging in vaginal or anal sex without a condom with at least one partner, and 52% reported using condoms none of the time during vaginal or anal sex (Walters et al., 2000). Moreover, a simultaneous logistic regression model indicated that respondents who had experienced domestic violence were 9.26 times (95% CI = 1.80, 47.53) more likely to engage in risky sexual risk behaviors than those who had not (Walters et al., 2000). Similar to other studies, having a steady partner (Calzavara et al., 1998) as well as a history of nonpartner sexual assault were predictors of inconsistent condom use (Walters et al., 2000).

Substance Abuse and HIV Risk Behavior. Although the link between alcohol and drug use (AOD) and HIV sexual risk behaviors has been well documented among non-AIAN populations (Stall, McKusick, Wiley, Coates, & Ostrow, 1986; Woods et al., 1996), research in Indian country is only recently beginning to address the co-occurrence of AOD use and risky sex among community-based samples. Alcohol and drug use combined with precocious sexual risk activity among AIAN youth has already received empirical documentation (Beauvais, 1992; Conner & Conner, 1992; Walker et al., 1996). Preliminary findings suggest that urban AIAN drug users are at greater risk for HIV than their reservation counterparts due both to the practice of trading sex for money and drugs, and also the co-occurrence of unsafe sex and drug use (Stevens et al., 2000). One study (Fenaughty, Fisher, & Cagle, 1998) found that drug-using Caucasian men were significantly less likely to use condoms with Alaska Native women than other women. In a related study of AIAN drug users, 50% reported drinking until drunk and engaging in unprotected sex during blackouts (Baldwin, Maxwell, Fenaughty, Trotter, & Stevens, 2000).

One of the NIDA studies investigated the relationship between combined alcohol and drug abuse and HIV risk behavior (Baldwin, 1999). Researchers found that combined alcohol and crack cocaine use was more strongly associated with unprotected sex, sex with strangers, and other HIV high-risk behaviors than crack cocaine use alone.

Among a New York City community-based sample ($N = 100$), preliminary evidence indicated that respondents who had engaged in sex while drunk or high were 14.35 times (95% CI = 4.65, 44.25) more likely to engage in risky sexual risk behaviors than those who had not (Walters et al., 2000). Finally, in a study of 151 HIV-infected AIANs who were sampled in Seattle, Denver, and Los Angeles via medical

record review, AIAN men were more likely than non-AIAN men to report the dual risks of injection drug use and having unprotected sex with other men (32% vs. 14%; Diamond et al., 2001). Additionally, AIANs were more likely to be diagnosed with an acute STD than non-AIANs (11% vs. 4%). In general, HIV-infected AIANs tended to be younger than non-AIANs, tended to be disproportionately women, and tended to be diagnosed with STDs and TB relative to non-AIANs (Diamond et al., 2001). These findings are consistent with HIV/AIDS surveillance data that show that AIAN women-reported AIDS cases have steadily increased over the past decade (19% of the reported 2, 537 AIAN AIDS cases are AIAN women; Centers for Disease Control and Prevention [CDC], 2001). This is particularly alarming given that other studies show that AIAN women have inconsistent condom use with partners who are known injection drug users (Fenaughty, Fisher, & Cagle, 1998).

On the other hand, there are a few studies which suggest a possible protective factor in some occurrences of AOD use. For instance, in one investigation of 11 reserves in Canada, the minority of subjects who engaged in sexual behavior while drunk or high were less likely to engage in risky sex (Myers et al., 1997). Also, preliminary cross-sectional research among an urban-based community sample suggests that AOD use (Walters & Simoni, 1999) and injection drug use (Simoni, Sehgal, & Walters, 2004) may mediate the relationship between traumatic stressors and HIV sexual risk taking among AIAN women.

The role of employment status in drug use and HIV risk behavior was the focus of another NIDA study. Researchers found that at 6 months after drug treatment, employment protected both against drug use and HIV risk behavior (Fletcher-Janzen, Strickland, & Reynolds, 2000).

COMMUNITY/SOCIAL-LEVEL VARIABLES: CULTURE, RACE, AND RACISM

Studies of AIAN HIV/AIDS behavior at the community and social level begin to reveal the extent to which cultural and racial considerations are a factor. A study of HIV/AIDS community/ethnic level risk factors among AIAN men and women living in New York City found that trauma variables were better predictors of HIV risk behavior than social cognitive variables (Walters et al., 2000) and concluded that the effects of community and individual level trauma on HIV risk should be the focus of future research. In fact, the authors suggested future research needs to identify the temporal patterns of exposure to traumatic stressors (e.g., cultural, historical, assaults) and AOD use to ultimately discern the mechanisms by which alcohol and traumatic stressors may act as covariates in sexual risk taking (Walters et al., 2000).

Community-level political disempowerment has been convincingly theorized as a risk factor. An editorial by a well-known and respected Native American psychologist, storyteller and AIDS activist, Terry Tafoya (1989), lamented both the geographic and cultural distance between many AIAN communities and their state and local HIV planning councils, health officials, and agencies. This distance makes it difficult for local AIAN HIV initiatives to get adequate funding and prevents many at-risk AIANs from trusting researchers, bureaucrats, and health care systems.

INSTITUTIONAL LEVEL: RESEARCH, INTERVENTION METHODOLOGY, AND TREATMENT

A few articles in the HIV/AIDS literature focus on the need for specific research and intervention methodologies in AIAN communities and could be directed toward funders who need more information on the nuances of this work. In an urban area

where the risk for HIV infection is high, Community Based Participatory Research is proposed as a useful model for planning and implementing HIV/AIDS prevention among at-risk AIAN women (Klein, Williams, & Witbrodt, 1999). Evaluation research provides a model for collaborative process in which insiders and outsiders work together to define problems, allocate resources, and determine goals and evaluation strategies. In this model, researchers welcome input from program participants and consider the influence of traditional AIAN values (Chavez, Duran, Baker, Avila, & Wallerstein, 2003).

Scant literature exists about how well the existing medical care treatment systems (as a social institution) actually meet the needs of AIANs who have HIV. Community-based participatory research by Duran, Harrison, Iralu and other community colleagues (2000) documented that AIANs with HIV/AIDS living on or near a frontier rural reservation in the Southwest express both less need for medical and ancillary services and also less access to those services, as compared with non-Native people living with HIV in urban areas. In this same study, 70% of all the AIAN HIV/AIDS patients who utilized traditional Native medicine services expressed a high degree of satisfaction with services. Another illustrative case study describes a substance abuse treatment program in San Francisco, the Friendship House Association of American Indians, that uses traditional Native spirituality for healing and to support behavior change among AIANs with AIDS (Rowell & Kusterer, 1991).

STRENGTHS AND WEAKNESSES OF THE EXISTING LITERATURE

The literature represents etiological and interventions research among AIAN subpopulation groups (e.g., urban residents, the homeless, substance abusers in and out of treatment, prisoners) who may be at greatest risk for HIV infection. Among these high-risk subgroups, there is credible preliminary evidence about HIV/AIDS knowledge, attitudes and behaviors that could inform prevention planning and reduce barriers to care.

Theories of etiology and prevention approaches that focus on individual and small-group knowledge, attitudes, and behavior are necessary for interventions at the lower levels of the socioecological framework. Risk and protective factors at the higher levels of the socioecological framework, however, need to include the historical, social, economic, and cultural contexts of HIV risk and treatment. The articles cited in our review that suggest interventions at the community, institutional, and social policy levels have not, to our knowledge, systematically been subject to research or employed in practice.

We propose approaching the problem from "both ends" of the spectrum—gathering effectiveness data on some "culturally supported interventions" while also testing the effectiveness of interventions found effective for non-Native populations in Native communities (Hall, 2001). This "both ends" approach considers community norms, power relations and resistance, cultural beliefs, racial and ethnic identities, and social and institutional policies as important targets for change.

NEW APPROACHES TO AIAN HIV/AIDS INTERVENTION, TREATMENT, AND RESEARCH

POSTCOLONIAL AND INDIGENIST APPROACHES

We utilize postcolonial perspectives in formulating our suggestions for further research and intervention. The primary proposition of postcolonial approaches is that the exercise of power can be both repressive and productive. Repressive power overtly

and covertly prevents people from using their land or property or restricts where people can live, work, or go to school. Productive power, on the other hand, is exercised through cultural products and other forms of ideology that form identities, such as the negative stereotypes that are circulated about certain racial groups, socioeconomic classes, or sexual orientations (Foucault, 1980). During colonization and to this day, cultural products (e.g., art, literature, music, educational texts, and travelogues) have helped formulate and circulate the European ideology of the Christian civilizing mission with respect to the AIAN population (Said, l993). Leaders at the institutional, community, and social policy levels framed the colonization, in part, as European cultural largesse reforming Native savagery. This perspective has developed into a deep psychological construct that informs the AIAN identity, often without full awareness of its source, purpose, or outcome (Gilman, 1988, 1995).

The utilization of postcolonial approaches for public health interventions is an attempt to change the negative stereotypes (e.g., the drunken Indian, the sexually deviant two-spirit) that affect how the AIAN people view themselves, how others view them, and how the AIAN people construct identities within the larger context of the American cultural matrix (Bhabha, 1983; Spivak, 1990).

The term *postcolonial* in our usage does not refer to any time period related to the policies that organized the European colonization. Rather, we date the postcolonial period by the appearance of third- and fourth- worldviews and ideas within the academic and intellectual community of the first world (Dirlik, 1994). Hence, postcolonial here refers to strategies that have as their foundation the epistemologies and value structures of both AIAN culture and Western science. In postcolonial approaches to social problems such as AIDS/HIV, these two systems (and potentially others) are evoked simultaneously, in sequence, or singularly, depending on the local situation and resources. Because the values of these two systems are not always (or even often) in accord, working through the shifting terrains of effectiveness, power, and meaning in these approaches marks the real commitment to work in the AIAN community.

One potential postcolonial approach is an "effective history" that (a) functions as a critique of the process of the production of knowledge of the "other," (b) conversely produces a recollection of the past that refused to be colonized by a mainstream perspective, and (c) negates that the present is an inevitable outcome of an essentialized past (Dean, 1994). For example, making available a history of medicine from an AIAN perspective could provide context for otherwise problematic therapeutic relationships and offer institutional- and community-level targets for intervention and healing.

A BRIEF "EFFECTIVE HISTORY" OF MEDICINE IN INDIAN COUNTRY

The interplay of race and disease has been significant in the history of both colonization and medicine in the United States. An important research area concerns AIAN community-level attitudes and behaviors regarding the U.S. health care establishment and the federal government's role in that establishment. When applied to HIV/AIDS risk and outcomes, these culturally specific histories draw on the lived experience of AIANs and cultivate respect for alternative ways of knowing, while nonetheless aiming to effect change that is accountable to Western measurement of outcomes.

Among the AIAN population, disease has functioned both as a significant historical variable and as an occasion for unethical medical treatment policies sponsored by

the federal government. Scholars estimate that in 1492 there were between 2.1 and 18 million American Indians living on this continent. By 1900 that population had declined to approximately 250,000 (Thornton, 1987). Disease and epidemics (small pox, bubonic plague, whooping cough, venereal diseases, mumps, pneumonia, etc.) brought to the Americas by Europeans were the main cause of that decline and the main mechanism of colonial expansion. The colonization of America was the "most striking example of the influence of disease upon history..." (Thornton, 1987. p. 47).

In addition, the role of medical research in Indian country has a dubious history. For example, in the mid- to late 1920s the Office of Indian Affairs (OIA) practiced medical experimentation using extreme and untested procedures (Benson, 2001). Between 1925 and 1927, medical agents of the OIA performed an estimated 22,273 unnecessary, experimental eye surgeries that resulted in severe eye disease, surgery complications, and blindness (Benson, 2001). More recently, the Indian Health Service (IHS) has acknowledged that in the 1970s up to 40% of its sterilizations were performed without adequate informed consent and in some cases, without women's prior knowledge or approval (Jaimes MA, 1992; Jarrell, 1992).

The use of disease as a strategy of colonization, a history of unethical research practice, and ongoing substandard medical treatment has left many AIAN individuals and communities distrustful. In 1975 Congress passed PL93-638, the Indian Self-Determination and Educational Assistance Act. This bill gives AIANs preference in IHS hiring and allows tribes to take over systems previously run by the federal government. Now over 70% of all IHS employees are of Native heritage (Nolan, personal communication, 2003). In more recent years, many feel IHS has contributed significantly to improved AIAN health status and has increased the provision of culturally competent health care (Bergman, Grossman, & Erdrich, 1999).

The current social movement among the AIAN people towards retraditionalization is another example of resistance aimed at changing long-held cultural perspectives (Duran, 1997). Retraditionalization attempts to reclaim traditional norms and values and has been documented as a critical connection to AIAN survival for the next millennium (LaFromboise, Berman, & Sohi, 1994).

AN INDIGENIST STRESS-COPING MODEL

Given the AIAN population's unique experience with colonization and its persistent outcomes, we ask: How do indigenous peoples cope with life stressors, and what effects do life stressors, cultural protective factors, and AOD risk factors have on HIV sexual risk and HIV exposure? Our modified indigenist stress-coping model is based on a preliminary model posited by Walters, Simoni, & Evans-Campbell (2002) and Walters & Simoni (2002). Our model posits that the effect of various types of trauma (in accordance with the levels of the socioecological model) on HIV sexual risk behaviors and exposure is moderated by cultural factors and AOD use that function as buffers, strengthening psychological health and mitigating the effects of traumatic stressors. These stressors include historical trauma; racial, sexual, and sexual orientation discrimination; traumatic life events; and urbanization.

Historical Trauma. The cumulative and intergenerational effects of historical traumas have been characterized as a "soul wound" among indigenous peoples (E. Duran & B. Duran, 1995; E. Duran, Duran, Yellow Horse, & Yellow Horse, 1998). Many researchers have concluded from anecdotes, community-based observations, and preliminary evidence that historically traumatic events might be related to poor mental health outcomes among AIANs (Dinges NG, 1988; May, 1995) such as "his-

torical trauma response" (Brave Heart & DeBruyn, 1998; Weaver & Brave Heart, 1999); posttraumatic stress disorder (PTSD) (E. Duran & B. Duran, 1995); alienation (Grandbois GH, 1994); depression (Johnson, 1994); alcohol abuse (Walker et al., 1996); and HIV risk (Walters et al., 2002).

Discrimination. In general, there is ample research evidence demonstrating the psychological cost of being a target of discrimination at individual, cultural, and institutional levels. Again, little of this research has focused on the AIAN population. Studies among fifth- to eighth-grade AIANs show that discrimination is related to withdrawn behavior, physical complaints, anxiety, and depression (Whitbeck, Hoyt, & Bao, 2000). According to another study (Terr, 1991), chronic trauma is more likely than single effect trauma to be associated with denial, numbing, and disassociative reactions among children. Among adults, a parallel finding suggests that discriminatory daily hassles have more negative health effects than single event traumas (Williams, Yu, Jackson, & Anderson, 1997).

Traumatic Life Events. Violence against AIANs is a serious problem within the U.S.. According to the United States Department of Justice as cited in Greenfeld and Smith (1999), AIANs are the victims of violent crimes at a rate (124 per 1000) more than 2.5 times the national average. The rate for AIAN women is almost 50% higher than that reported by African American males (98 per 1000 vs. 68 per 1000), and the rate for AIAN males is double that for all males (153 per 1000 vs. 60 per 1000). The violent crime rate was highest for urban AIANs (207 per 1000), and lowest for AIANs residing in rural areas (89 per 1000). AIANs primarily experience assault-related violence, with 56% having experienced simple assault, 28% aggravated assault, and 6% sexual assault. Furthermore, AIANs are more likely than other racial groups to report interracial violence: 70% of AIAN assailants are non-AIAN and 60% are Caucasian (Greenfeld & Smith 1999).

AIANs who are gay, lesbian, bisexual, or transgendered (GLBT) additionally appear to be at high risk for violence (Walters, Simoni, & Harris, 2000). One study (Berrill, 1990) found that among gay and lesbian adults, 87% reported verbal assault based on their sexual orientation. Anti-gay victimization has not only been associated with physical harm but has also been associated with psychological harm, including diminished feelings of trust, safety, self-worth, increased feelings of fear and hypervigilance, heightened internalized homophobia, and increased social distancing from other GLBTs (Kuehnle & Sullivan, 2001; Merrill & Wolfe, 2000; Ratner et al., 2003).

Urbanization. The Relocation Act (Public Law 959) of the early 1950s instigated a mass migration of AIANs from reservation and rural settings to large cities across the United States As a result, more than 70% of AIANs live off the reservation or tribal trust lands, with the majority residing in major urban centers (U.S. Census Bureau, 2001). Only a handful of studies provide any relevant data on urban AIAN health-related concerns. One, from Washington, D.C. (Grossman, Krieger, Sugarman, & Forquera, 1994), indicates that urban AIANs are much less healthy than European Americans. For example, risk factors for poor birth outcomes were significantly higher for AIANs than for European Americans and resembled the rates among African Americans. All communicable diseases studied were significantly more common among urban AIANs than European Americans. Urban AIANs also suffer a poverty rate 3 times that of any other ethnic group, and, as in reservation settings, low socioeconomic status correlates with poor heath outcomes. These data on the economic vulnerability and ill health of urban AIANs suggest they may be disproportionately at risk for HIV infection (Metler, Conway, & Stehr-Green, 1991).

CULTURAL PROTECTIVE FACTORS

Identification of factors that might promote HIV protective behaviors or buffer the impact of traumatic stressors on HIV risk behaviors among AIANs is also a critical focal point of both indigenous etiology and postcolonial change. The factors below are not comprehensive, but rather are starting points from which to further identify intervention points for future research.

Spirituality and Traditional Health Practices. For AIAN peoples, spirituality forms a core protective factor that might moderate the effects of traumatic stressors on HIV risk behaviors. Despite over 500 years of missionary activities and colonial suppression of indigenous religious rites and ceremonial practices, many AIAN communities continue to express their ceremonial rights and obligations. In fact, Nativistic movements with themes of temperance, abstinence, and retraditionalization has been a key form of resistance to colonial subjugation and, in turn, has also strengthened many communities' wellness behaviors (B. Duran, 1996; Walters, Simoni, & Evans-Campbell, 2002). Empirical research among non-AIANs suggest that spiritual resources are a major antidote to anxiety and demonstrate that spiritual coping, immersion in traditional health practices, and working with traditional healers have intrinsic benefits associated with AOD use, PTSD (Arbogast, 1995; Levy, Neutra, & Parker, 1987), and other health-related outcomes (Marbella, Harris, Diehr, Ignace, & Ignace, 1998; Buchwald, Beals, & Manson, 2000; Wheatley, 1991). In one study, urban AIANs living with HIV had incorporated traditional values and healing practices into their HIV health care (Brassard et al., 1996). Interestingly, AIAN research indicates that urban AIANs utilize traditional healers and health practices at the same rate or more frequently than non-AIANs use complementary medicine (Buchwald et al., 2000; Waldram, 1990).

Identity Attitudes and Enculturation. Many researchers have focused on personality constructs or temperament as explanations for the variability observed among individuals under stress, despite inconsistent and contradictory findings. Given that not all individuals at risk develop unhealthy coping behaviors in the face of stress, certain factors, either internal or external, clearly affect the manifestation of coping behavior. AIAN identity attitudes and enculturative behaviors that are forged through participation in resistant social movements may be important protective factors.

While little research has examined identity attitudes as a protective mechanism among AIANs (Walker et al., 1996), one preliminary study suggests that it is an important factor in terms of self-esteem, coping with psychological distress, and depression (Walters, 1995). Specifically, results among 332 urban AIANs indicated that the identity attitude domains accounted for 10% to 21% of the significant changes in self-esteem, depression, anxiety, and interpersonal-sensitivity after controlling for age, sex, education, income, and reservation contact (Walters, 1995). The findings parallel other identity research findings (Ossana, Helms, & Leonard, 1992; Parham & Helms, 1985; Walters, 1999) and suggest that understanding the process of urban AIAN identity development is critical to formulating mental health assessments and interventions with urban AIANs.

In contrast to acculturation (which refers to the process by which an ethnic minority person adopts and assimilates the majority culture), enculturation is the process by which individuals learn about and identify with their ethnic minority culture. It expresses the level of immersion into one's cultural heritage, norms, and traditional

values. Enculturation studies among AIANs arose in response to the need to identify strengths in AIAN youth's lives rather than the deficits identified by many acculturation studies (Zimmerman, Washienko, Walters, & Dyer, 1996). Several researchers have suggested ethnic identity alone does not capture the multidimensional nature of cultural experience or connection to one's cultural behaviors (Little Soldier, 1985; Oetting & Beauvais, 1991; Trimble, 1987; Walters, 1999). One study (Zimmerman et al., 1996) suggests that enculturation is a protective mechanism that can either mitigate the negative effects of a risk factor (e.g., stressors) or enhance the effects of another variable (e.g., identity attitudes) to decrease the probability of a negative outcome (e.g., HIV sexual risk behaviors).

CONCLUSION

Many unpublished AIAN HIV/AIDS prevention and treatment programs use indigenous epistemology as the root metaphor. These programs make use of postcolonial approaches: integrating indigenous theories and strategies of healing methods with Euro-American models of research, implementation, and evaluation. An important principle of these approaches is that AIAN principles and beliefs and knowledge are valid and integral to the treatment process and to determinations of need within the AIAN community. Standard cost/benefit analyses are necessary, but they are not sufficient methods for determining AIAN community needs or program priorities.

INTEGRATING APPROACHES

Although indigenist etiology and postcolonial approaches to change are vital to expanding HIV/AIDS prevention and treatment options among the AIAN community, it does create the potential for conflict between the two very different value structures represented by traditional AIAN culture and Western science. Jürgen Habermas' theory of communicative action (1984) may be useful as a potential model for integrating these differing values. Habermas outlines three validity claims as prerequisites for communication that *reaches understanding*. These three requirements are truth, normative legitimacy, and authenticity (White, 1988). Traditional AIAN values and Western science may be balanced using these three validity claims as a means of negotiating otherwise incompatible values. In our model, "truth" becomes accountable to Western empirical measures of usefulness, "normative legitimacy" becomes accountable to AIAN cultural values of community integration and reproduction, and "authenticity" becomes accountable to the sincerity and consistency of the representatives from each value system as they work for integration and agreement.

In this paper we have provided support for the establishment and implementation of an indigenist/postcolonial public health theory as it applies to HIV/AIDS prevention and treatment among the AIAN population. Although our work has focused on the AIAN community, our suggestions for developing postcolonial approaches to public health problems may be applicable to high risk, target populations whose identities and cultures have been dramatically affected by the past and present processes of imperialism, colonialism, and globalization. Our suggestions may also be useful to newly emerging groups whose marginalization is determined by the distance of their identities and lifeworlds from the norm.

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