Professional Psychology: Research and Practice
2009, Vol. 40, No. 2, 134–140

0735-7028/09/$12.00 DOI: 10.1037/a0013253

A College Suicide Prevention Model for American Indian Students

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College student suicide prevention efforts are important to campus administrators and mental health professionals due to increasing concerns about managing suicidal students. This article describes the development and preliminary effectiveness of a campus suicide prevention program designed for American Indian (AI) students who are at higher risk for suicide compared with the general population. Using the medicine wheel as a guiding framework, the current prevention model integrates communication links between AI tribes and prevention program staff, educational and cultural programming, and spiritual ceremonies with the larger campus mental health resources available to students. A discussion of the barriers faced and solutions generated for implementing the program is offered, along with suggestions for disseminating this AI-specific prevention program to other universities.

Keywords: suicide prevention, American Indian youth, college students, Native Americans

College students are among those most at risk for suicide, and recent reports have suggested that the prevalence of suicide in this group increased 8% from 2003 to 2004 (Centers for Disease Control and Prevention, 2007b). Thus, college campuses represent an important point of intervention for the prevention of suicide for many young adults. Of further concern is the finding that suicide among American Indians (AIs) ages 15–34 years is 1.9 times higher than the national average (Centers for Disease Control and Prevention, 2007a). Select data from the National College Health Survey (American College Health Association, 2005) found that approximately 15% of AI students reported seriously contemplating suicide over the past 12 months, compared with 9.1% of non-AI students; 5.7% of AI students reported attempting suicide, compared with 1.2% of non-AI students. These findings demonstrate the need for prevention efforts geared toward addressing specific risks among AI college students.

In addition to common risk factors for suicide such as depression and substance use (LeMaster, Beals, Novins, & Manson, 2004; Olson & Wahab, 2006; Shaughnessy, Doshi, & Jones, 2004), there are some suicide risk and protective factors specific to AI youth. One risk factor that has received recent attention is historical trauma, which refers to intergenerational distress resulting from group genocide, torture, or cultural marginalization (Yellow Horse Brave Heart, 2003). Through the process of colonization and subsequent boarding school practices, AI populations have suffered significant historical traumas that have resulted in lost connections to cultural traditions and practices (Yellow Horse Brave Heart, 2003). While few empirical studies have specifically examined the role of historical trauma in suicidal behavior, several authors have identified it as an important risk factor specific to AI suicides (Marrone, 2007; Struthers & Lowe, 2003; Yellow Horse Brave Heart, 1998, 2003). A recent study by the Cedar Partnership Project et al. (2008) examined the role of historical trauma in suicide in Canadian Aboriginal youth. Results showed a significant relationship between having at least one parent who attended a boarding school and youth suicide ideation and attempts, suggesting that intergenerational trauma is an important risk factor.

Similar to the suicide risk associated with historical trauma, research indicates that those who have managed to preserve or reclaim their cultural heritage tend to have better mental health and

Editor's Note. This is one of eight accepted articles received in response to an open call for submissions on interventions for suicidal persons across the life span.—MCR

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THIS MODEL WAS DESIGNED by Jacqueline S. Gray, Center for Rural Health at the University of North Dakota, and was developed for the American Indian Campus Suicide Prevention Project, which is a Garrett Lee Smith Campus Suicide Prevention Grant funded by the Department of Health and Human Services, Substance Abuse and Mental Health Services Administration, Grant 1SM57856-01.

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reduced suicide risk. A study by Chandler and Proulx (2006) examined the relationship of cultural continuity and youth suicide risk. Cultural continuity was measured by the degree to which the tribal community preserved cultural ties to the past as well as the level of tribal self-government. Results showed that a high degree of cultural continuity was associated with significantly lower rates of youth suicides when compared with low cultural continuity communities. Enculturation, which is the extent to which one identifies with traditional ethnic culture, has also been found to be negatively associated with suicide ideation and attempts among AI youth (Yoder, Whitbeck, Hoyt, & LaFromboise, 2006). Furthermore, knowledge and practice of Native American spirituality are viewed as important protective factors among AI youth. A study of Northern Plains tribes found that commitment to cultural spirituality was associated with a lower prevalence of suicide attempts, even after controlling for age, gender, substance abuse, and psychological distress (Garroutte, Goldberg, Beals, Herrell, & Manson, 2003). These studies suggest that spirituality and cultural traditions are unique protective factors for AI youth. Therefore, including cultural knowledge and practices in a manner that strengthens or reconnects AI students to cultural traditions should be a critical component of suicide prevention programs targeting this group.

Unfortunately, there are few culturally specific suicide prevention models available for AI youth. One program that is available for AI adolescents is the Zuni Life Skills Development curriculum (ZLSD; LaFramboise & Howard-Pitney, 1994, 1995). This program integrates aspects of Zuni culture into material that teaches life skills known to reduce suicide risk factors and build resilience (LaFramboise & Howard-Pitney, 1994). While the ZLSD curriculum has some empirical support for effectiveness within Zuni tribes (LaFromboise & Howard-Pitney, 1995), it is unclear whether its effectiveness generalizes to other Native communities. Similar to the ZLSD prevention program, most AI suicide prevention programs have been developed for youth living in reservation communities (Middlebrook, LeMaster, Beals, Novins, & Manson, 2001), and few have been systematically evaluated for effectiveness (May, Serna, Hurt, & DeBruyn, 2005; Middlebrook et al., 2001). Furthermore, there are no known programs developed to address suicide prevention specifically among AI college students.

The purpose of this article is to describe the development and preliminary effectiveness of a model of suicide prevention for AI college students that can be infused within the larger university system. The current model utilizes a culturally informed circle-of-care approach that builds upon mainstream suicide prevention strategies by incorporating AI traditional practices, knowledge, and outreach. The prevention model adopts a supportive approach that emphasizes reaching out to potentially vulnerable students in an effort to de-escalate risk for suicidal behavior and connecting them to protective aspects of cultural traditions. The focus is on empowering AI students to discover and utilize culturally appropriate resources, along with existing campus services, to meet their needs.

Overview of the Current Model

Consistent with the AI holistic worldview, the current suicide prevention model attempts to integrate connections between (a) AI students, campus departments and services, and tribal communities; (b) AI culture and spirituality; and (c) educational aspects designed to develop skills, strengthen relationships, and build resilience. To accomplish this holistic approach and maintain cultural sensitivity across various tribes, the current program is grounded within the AI cultural symbol of the medicine wheel.

The medicine wheel and its underlying meanings are well known among many AI tribes, but the philosophy originated from the Lakota tribe (Dapice, 2006). The medicine wheel (see Figure 1) is sectioned into four multidimensional sacred parts that are believed to be strongly connected to and representative of the circle of life (Roberts, Harper, Tuttle-Eagle Bull, & Heideman-Provost, 1998). These four sacred parts represent many relationships that can be expressed in sets of four, such as the four sacred colors (red, yellow, black, and white), the four parts of the spiritual and physical world (mental, physical, emotional, and spiritual), the four values of the Lakota (respect, generosity, wisdom, and courage), and the four directions (East, West, North, and South). A key principle of the medicine wheel is interconnectedness, which emphasizes that all aspects of one's life influence the others (Coyhiss & Simonelli, 2005). Thus, healing in one area can be impacted by healing in another. The medicine wheel is used as a conceptual

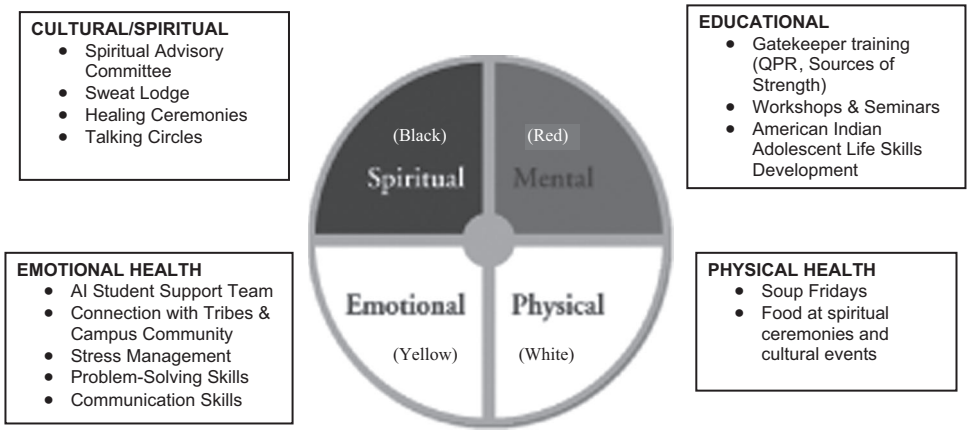

Figure 1. Program elements associated with the medicine wheel. QPR = QPR (question, persuade, and refer) Gatekeeper program.

framework to describe the main components of the proposed model and how the program attempts to address many aspects of AI wellness. The four sources of strength identified within the medicine wheel as mental, physical, emotional, and spiritual comprise the core content of the current prevention program model (see Figure 1).

Prevention Components of the Medicine Wheel's Sources of Strength

Mental. Suicide risk detection education is the key element of the mental strength addressed in the current model. A primary educational goal is providing gatekeeper training to all students and faculty/staff who serve on an AI support team. Gatekeeper training curriculum includes the Sources of Strength (LoMurray, 2007) and QPR (question, persuade, and refer) Gatekeeper (Quinnett, 1995) programs. The Sources of Strength gatekeeper training was designed for use with Northern Plains Indian youth and focuses upon helping students to build support networks, reconnect with resources that have been helpful in the past, and build new support networks (LoMurray, 2007). The Aberdeen Area division of the Indian Health Service adapted the original QPR program for use with AI persons, and it is this program that is used to train lay and professional persons in the warnings signs of suicidal behavior and how to intervene when someone is suicidal. Training in both Sources of Strength and the AI-QPR are offered annually to program staff and students and to tribal or university persons when requested. Additionally, educational workshops on topics such as risk factors for suicide, problem solving, communication skills, and stress management are provided regularly to students to build mental resilience and health.

Physical. American Indian traditions often involve the preparation of a meal because food is seen as an important element that nourishes physical needs and fosters connections with others. Food is often used as an offering at cultural ceremonies (e.g., pow wows, sweat lodges, pipe ceremonies) and represents an important aspect of the physical part of the medicine wheel. Therefore, this aspect of the model is addressed by offering food at suicide prevention program events. In addition, food is used to bring together AI students and the greater university community to foster connections with each other and develop a sense of trust, which is important in encouraging AI students to seek help (Marrone, 2007). Building this connection is accomplished by partnering with existing programming provided by American Indian student services. One example of such a partnership involves the University of North Dakota suicide prevention program staff's participation in "Soup Fridays," which provides free soup to students, staff, and faculty every Friday. This weekly event serves as an opportunity for students to enjoy a free meal as well as interact with the suicide prevention program staff, along with campus staff and faculty in an informal environment. It is through the continuity of this event that alliances are built with AI students so they feel more comfortable approaching staff or faculty when a personal crisis occurs. In addition, these informal interactions provide a potential point of intervention that might otherwise not occur because it allows staff to observe student functioning.

Emotional. This aspect of the medicine wheel is addressed in several ways in the current model. First, a program counselor with a background in clinical or counseling psychology provides mental health services in a culturally sensitive manner. The program counselor is based at the American Indian Student Services Center, providing AI students with direct access to mental health services in a setting where they already access other campus services. Furthermore, the faculty and staff at American Indian Student Services Center are often the first to observe that a student is struggling with academic and/or interpersonal stressors. Having a mental health provider readily accessible to AI students increases the likelihood that faculty and staff can ensure the students' needs are being met. The program counselor also provides educational seminars to assist students with improving overall emotional functioning such as coping with stress and effective problem solving. However, there are many issues that can arise among AI students that do not necessarily get communicated to program staff. Students are often in a position where they rely on their peers for emotional support when crises occur while at school or in the students' home community. Our program integrates this informal peer support system within the larger prevention model to further address emotional health and is described below.

One of the factors associated with academic persistence among AI students is social support from their family and tribal community (Montgomery, Miville, Winterowd, Jeffries, & Baysden, 2000; Rousey & Longie, 2001). As a result, students are often negatively impacted by traumatic events that occur on their home reservation. In many cases these events may not always come to the attention of campus personnel. Thus, AI students serve as a vital source of information as well as intervention for students who are experiencing distress. In order to create a bridge of communication between students and campus support personnel, the current model includes an AI student support team. This support team is composed of AI students from the campus community and program staff. Potential student members are identified by peers, university staff, or self-nominations and must apply to be a part of the team. Most students on the AI student support team are from a variety of the helping professions, including psychology, nursing, teaching, and social work. The most important feature is to have representation from all tribes in the surrounding area so that communication with the reservations can be facilitated.

There are several levels of communication required to make this model effective in addressing the emotional needs of AI students and to be consistent with the AI cultural worldview that all worlds (campus community, tribal communities) are interconnected. An important part of this model includes developing a network of communication links among students, tribal representatives, program staff, and campus services such as the counseling center and university crisis team. The connection between university-based and tribal persons provides a line of two-way communication about traumatic events occurring at home that may impact students, who are often several hundred miles away from their reservation communities. As a result of the communication links, students on the AI support team, as well as program staff, can be alerted to follow up with other students potentially impacted by a home event, ensuring their needs for support and coping are being met. Additionally, the reservation–university program link helps administrators and faculty become aware of any ripple effects that may impact the campus as well as any AI students who may be affected, permitting early intervention. There are also situations requiring assistance in negotiating absences from classes or exams to attend funerals or other spiritual and cultural ceremonies that both the AI support team students and staff facilitate.

Spiritual. Although there are some universal cultural practices across most AI nations, there is great diversity among tribes with respect to spiritual values and traditions making it difficult to generalize cultural programming across AI groups (Whitbeck, 2006). However, an omnipresent belief among many AI tribes is that traditional knowledge and practices have a strong healing influence, significantly impacting one's well-being and reducing suicide risk (Broome & Broome, 2007; Garroutte et al., 2003; Yoder et al., 2006). Therefore, connecting students with traditional cultural practices is an essential component of the current model. Offering access to spiritual ceremonies enables students to become knowledgeable about traditional AI culture, strengthening suicide resilience. Students who are already knowledgeable can stay connected to traditional practices while pursuing their education from afar.

In order to address the spiritual needs of AI students on the University of North Dakota campus, a Spiritual Advisory Committee was formed to coordinate all spiritual ceremonies. If a student or staff member expresses a need for a particular ceremony, it is facilitated and provided through this committee. Due to the importance of this committee, it is composed of students, campus staff, and AI community members who are competent in providing spiritual and cultural ceremonies representative of various Northern Plains tribes. Given the considerable variation between tribes with respect to cultural and spiritual practices, the Spiritual Advisory Committee attempts to provide access to as many specific tribal ceremonies as possible so that no one tribal practice takes precedence. Spiritual ceremonies include talking circles, sweat lodge ceremonies, cleansing ceremonies, wiping of tears, and a general AI cultural ceremonies presentation. If there are ceremonies requested that the Spiritual Advisory Committee cannot provide, the committee members work with the students to identify someone who can perform the ceremony and assist with the arrangement of those services. Thus, the current model provides direct access to AI spiritual and cultural healing venues or persons that can be integrated into the students' university life. Having a connection to traditional spiritual practices on campus helps to prevent student attrition when faced with life stressors or crises and further promotes the integration of AI cultural supports with the support services offered by the larger university.

Preliminary Data on Effectiveness and Program Utilization

To date, approximately 90 AI students (24.5% of total AI student enrollment; $N = 368$) have utilized at least one aspect of the AI suicide prevention program. Of those having contact with the program, 4 were directly referred for crisis services, 36 attended program workshops or trainings, around 35 have requested or utilized ceremonial venues, and a number have had informal contact with program staff for support services, psychoeducation, or relationship building.

To aid in evaluating the potential effectiveness of different program workshops, researchers collect pre- and posttest data. A seven-item true/false suicide knowledge scale is used to evaluate the immediate outcome of gatekeeper trainings and workshops focusing on educating students about suicide. The suicide knowledge scale items were pulled from existing questionnaires that have demonstrated reliable change as a consequence of participation in a training curriculum (Shaffer, Garland, Vieland, Underwood, & Busner, 1991; Spirito, Overholser, Ashworth, Morgan, & Benedict-Drew, 1988). Total knowledge scores are calculated by summing response values, with higher scores (maximum score = 14) indicating greater knowledge. Preliminary analyses, collected from 22 AI students who participated in gatekeeper trainings, indicate a high baseline suicide knowledge ($M = 12.56$, $SD = 0.99$). Results from the posttest measure ($M = 13.30$, $SD = 0.93$) show a significant, albeit small, improvement in knowledge, $F(1, 22) = 12.32$, $p < .01$, partial $\eta^2 = .359$. Subjective reports from participants indicate that for 45.7%, the material presented was at least somewhat new to them, 72.5% stated they would definitely use the information, and 86.3% reported being very satisfied with the training. Recognizing that behavioral markers would provide the best data regarding effectiveness, we can report that at least two students who have used the AI program for crisis intervention were referred by students who attended one of our trainings.

Educational seminars on such topics as stress management, problem-solving skills, and substance abuse awareness and prevention were also provided. The primary content used in these workshops was adapted from LaFramboise's (1996) curriculum (e.g., emotions and stress, problem solving; developing coping strategies, recognizing self-destructive behavior), for college students by using age-appropriate examples and language, as well as integrating Northern Plains cultural pieces. A five-item true/false pre- and postmeasure of workshop content comprised the evaluation of the programming. Total scale scores were calculated by summing responses (maximum score = 10), with higher scores indicating greater content/skills knowledge. Preliminary data show that the workshops have had an impact upon student learning. Pre- ($M = 8.75$, $SD = .71$) and postmeasures ($M = 9.5$, $SD = .54$) of problem-solving knowledge showed significant improvements, $F(1, 7) = 5.73$, $p < .05$, partial $\eta^2 = .432$. Increases in communication skills knowledge were suggested, $F(1, 3) = 3.01$, $p = .182$, but hard to detect due to the extremely small sample size (power = .231). Similar to the gatekeeper trainings, students ($n = 35$) reported high levels of satisfaction with the workshops (88.6% reported being satisfied to very satisfied). Seventy-five percent of students reported they would use the information learned, 54.3% indicated that the material presented was somewhat new, and 22.9% reported that the information was new to them.

Barriers to Implementation and Potential Solutions

The current suicide prevention model represents a dedicated attempt to integrate various Northern Plains cultures into a meaningful approach to suicide prevention that both builds resilience and offers support to this population of college students. However, there are potential programmatic barriers to overcome. We highlight the predominant barriers encountered and identify solutions to address them.

Lack of Empirically Supported Prevention Resources for AI Cultures and College Students

Designing workshops and skills trainings that are culturally relevant across tribes is important to maintaining student connection to the program and building resilience. However, there are few AI specific suicide prevention resources available. Of those available, all have been designed for use with young adolescents. The solutions we arrived at were to utilize gatekeeper programs that

have been previously used with AI youth (LoMurray, 2007; Quinnett, 1995) as the primary trainings we offer. Additionally, when designing more general workshops (e.g., concerning problem solving, stress management), we adapted materials from AI adolescent-based prevention programs (LaFromboise, 1996) by modifying the examples and language to be college-age-appropriate. To assist with integrating cultural variations across AI tribes in our programming, we have looked to unifying themes, such as the medicine wheel, to further inform content and activities. Within the workshops, we facilitate sharing of the unique modifications persons from differing tribes may make to the content discussed to make it culturally meaningful to them. As a result of our solutions, students have reported high degrees of satisfaction with the programming, and a few have used their training to refer students.

Lack of Programming Staff Familiar With AI Culture and Customs

Having knowledgeable program staff enhances the cultural salience of the programming and provides personnel who can lead healing ceremonies and other customs specific to a tribe, ensuring inclusiveness for our AI students. Recognizing that some campuses will not have access to such personnel, one solution we incorporated into the program was having an AI student support team that is integrated with the larger program staff team. The outcome has been that each tribe is represented within our program and these students can provide a "check" on the cultural salience of program offerings. Another potential solution is to identify campus or community personnel who are affiliated with any AI campus programs or tribes and engage these persons. Another solution would be to locate an AI cultural consultant who could assist with program design and ensure that both content and activities are culturally sensitive and relevant. Seeking guidance from networks such as the Society for Indian Psychologists would be another way to utilize existing AI-specific resources to inform program content and activities.

Limited Cultural Knowledge Among Administrators and Key Stakeholders

An occasional conflict can arise between administrators and program staff regarding requests for maintaining culturally relevant supplies, facilities, and resources to perform healing ceremonies or other program activities. For example, a request for funds to provide food at a healing ceremony following the death of a key AI person in the student community was denied. This represents a cultural clash because sharing of food during this type of ceremony is synonymous with the custom of Communion in Christian rituals and Jewish Passover dinners. Our solution was to provide education about the cultural meaning salient in this request. After providing requested documentation of the cultural importance of this request, we were granted the funds to provide food. However, this may not always be the case. An alternative solution could be to have a potluck where students who wanted to could bring food as part of the ceremony or to have program staff bring food. Another option would be to seek community or corporate sponsorship of the event. Other potential solutions to address a lack of cultural knowledge among key stakeholders and administrators would be to provide AI cultural education/training seminars for all university persons as well as to informally share information on AI customs. Providing interactive events on campus (e.g., simulated talking circle, AI night at the university cultural center) that demonstrate aspects of AI culture may also help promote greater understanding and knowledge. For example, we had an AI spiritual leader provide a day-long seminar on Native American spirituality and practices that was open to the entire university.

Integrating the AI Holistic Model Within a Nonholistic University Model of Suicide Prevention

Many universities are struggling with ways to provide the best care to suicidal students while managing perceived legal risks, which has led to the adoption of protocols that may be perceived by AI students as punitive. For example, our university utilizes a model (Joffe, 2008) that requires students identified as at risk for suicide to complete three sessions of counseling and places a hold on their academic record if the sessions are not completed. While one can infer positive intentions with this requirement, it represents more of a disciplinary model than a supportive model. A required treatment protocol may, for AI students, be reminiscent of the boarding school traumas of the past as well as be inconsistent with the holistic or spiritual healing approach respected by AI populations. The solution we have adopted to address this barrier is to provide students access to an AI program counselor. This counselor interacts with AI students on a regular basis and, for those who may be at risk, provides initial crisis intervention counseling, facilitating access to further care if indicated. As part of the interactions, the AI program counselor informs students about mental health care options on campus, in the community, or on the reservation and assists the student in seeking those services. The outcome of this approach has been positive, with AI students informally reporting that they prefer interacting with our program counselor because "trust has been formed" and because he or she provides positive choices for services rather than mandating a particular approach. While our proposed solution does not change the institutional policy, it provides AI students with another alternative that may be more culturally appropriate. Another solution may include presenting alternative models of suicide prevention/intervention that are more compatible with AI holistic views to the university suicide prevention coordinators for consideration.

Facilitating Coordinated Care Across University Health Services

Due to the breadth of the student services offered on campus, integrated care can pose a significant barrier. An example we faced was that the existing university crisis team administrators initially resisted integration of program staff because they perceived our AI crisis team model to be infringing on their "turf." To resolve this barrier, we spent time with the university crisis team administrators clarifying our model, discussing our focus, and sharing ideas about how the two programs are complementary and not mutually exclusive. The outcome was that both the AI suicide prevention director and program counselor were added to the university crisis team. Other potential solutions to institutional communication barriers are to increase awareness of the specialized AI suicide prevention program campuswide and to maintain frequent communication with the various health services on campus. Some

universities may consider forming a student health service committee where the key administrators or directors meet bimonthly to discuss student care and health promotion/suicide prevention initiatives so that all stay informed and work together. Another possible solution is to have at least one staff person from the various health services as part of the AI prevention program team or to invite the administrators of the different campus health services to the trainings, workshops, and quarterly program meetings. In general, to be effective, the model needs to be viewed by the university community as another resource and not as a separate or competing entity.

Coordinating With Key AI Tribal Persons

Maintaining communication regarding tribal and university events relevant to AI students is critical to the successful implementation of the prevention model but can pose a significant barrier. One solution we built into our program was having either a program staff person or AI student on the support team who is familiar to at least one tribal person for each of the tribes in our state and who then may act as a communication liaison between campus and the home reservation. We also maintain and update lists of health service providers at each tribal reservation in the state so we can facilitate access to tribal care for students who request it. The outcome has been positive in that program staff have been informed by a tribal person of critical events occurring on the reservation that could potentially affect our students. For example, our program coordinator learned of an accident in which a student's immediate family was killed on the reservation. The program coordinator and other staff persons reached out to this student to provide crisis intervention, a healing ceremony, and links to resources both on campus and at the home reservation in an effort to prevent suicide. The student returned to school sooner than anticipated because of the circle of support he received and recovered from the loss without suicidal behavior. For campuses that may not have access to tribal leaders, a potential solution for this barrier would be to organize an AI student team who could act as a liaison with AI students on campus, informing prevention staff of significant events that may serve as critical events for risk escalation. Another potential solution is to reach out to community members who may have tribal ties and would be willing to facilitate connections. Developing networks between universities in the surrounding area who may have a larger AI student body or tribal connections is another option.

Attracting Students to Programming

The critical programmatic barrier is attracting students to the programming efforts. Our attendance at program events has ranged from zero (0) to 15 persons. As evident in our evaluation data, the students who have attended tend to have high knowledge regarding suicide risk. Thus, a related barrier is reaching less knowledgeable students. One solution we have adopted is to integrate our programming with other AI student programming that exists on our campus. For example, there is an AI Living and Learning residence hall that frequently has activities and programs. We have placed some of our suicide prevention workshops into their regular schedule. The current model also utilizes social events such as Soup Fridays as a way to promote connections and obtain suggestions for program events from students. The outcome has been that many of the students who attend the programs are those who have had informal contact with staff, so this process increases attendance. However, we have not found a working solution for reaching students without high suicide knowledge or awareness. One potential solution we intend to try is using peer-to-peer networking, in which AI student support team members help present content and specifically invite other AI students to an event. Another possibility is to obtain information about AI students who get placed on academic probation (a risk factor for suicide) and reach out to those students, inviting them to attend program events. Encouraging other university staff and faculty to refer students or advertise program events would be another potential option. Infusing AI prevention activities into existing multicultural events on campus may be another way to reach some students not currently being served.

Evaluation of Program Effectiveness

Conducting a feasible and useful evaluation of program effectiveness can also present a barrier. The model was designed so that effectiveness could be assessed from three primary sources: interviews with program staff, self-report data from students who have contact with the program, and demographic records. Conducting interviews with program staff has helped to further define programmatic goals, initiatives, and programming. However, we encountered difficulties implementing pre- and postmeasure data collection at workshops due to inconsistencies across workshops. Our solution was to create a standard pre–post template, train all program staff on the importance of data collection, and provide reminders. Workshop leaders could also incorporate the assessments into the program content.

To date, the greatest barrier to program evaluation has been obtaining behavioral indicators of effectiveness. For example, we planned to collect demographic information from campus health services to track utilization by AI students. Due to the loss of our contact person at student health services and to university structure, access to such data was cut off. Furthermore, our campus lacks an integrated database of service utilization, so if we were able to obtain access, multiple databases would need to be analyzed. While we have not yet found a solution to this obstacle, one potential solution is to facilitate the creation of a universitywide service utilization database. Stressing the benefits that such a system would have for the larger university would probably assist with this effort. Another solution is to partner with the administrators responsible for each service so that access to demographic data for tracking purposes would be more easily obtained. Establishing a relationship with the director of student health may be another way to increase access to data and resolve this problem.

Program Dissemination

Although our AI suicide prevention model has been developed for the unique atmosphere of our campus, there remain core elements of the program that could be applied at a wide variety of universities and colleges. The primary mechanisms underlying the current model for suicide prevention are cultural salience, communication, and outreach support. One of the primary communication pieces is between AI students, tribal leaders, and program staff. As discussed previously, for campuses that do not have access to tribal persons, developing networks with AI persons

through professional organizations, community contacts, and surrounding universities is one way to establish the AI cultural infrastructure of this program. Working with AI students on campus or establishing an AI organization inclusive of faculty, staff, and students is another way to build the important connections and foster communication between prevention staff and the AI students being served. These connections will enhance the communication as well as provide the needed links between student life and program resources for supportive outreach.

As for direct prevention events, specific workshop content and gatekeeper trainings can be integrated into existing university programming. Infusing AI cultural content into other multicultural programming is one way to apply the current model in a university setting different from ours. Campuses tend to have organizations designed to assist underserved students and offer training or programming specific to building resilience within these groups. Including training on AI culture and strengths is another way in which to disseminate essential cultural elements of the current model within existing programs. Offering programs or designing events that create welcoming environments and provide a mechanism through which AI students can build connections to both their culture and other persons on campus embodies the heart of the current AI suicide prevention program and can be implemented across a variety of campuses.

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Received December 3, 2007
Revision received June 20, 2008
Accepted June 23, 2008 ■