SYNOPSIS

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American Indian and Alaska Native adolescent suicide is a serious concern for the mental health of Indian youth and for the development of public health programs. Indian adolescent suicide patterns are influenced by multiple factors, including the tribal-specific nature of all Indian suicide patterns, a history of intense acculturational stress on Indian communities, the association of co-morbidity with substance abuse and other psychiatric illnesses, patterns of cluster suicides, behavioral contagion, and the rising U.S. teenage suicide trends. This section reviews the epidemiology of Indian/Native adolescent suicide, reports Indian/Native-specific case and research studies, and summarizes major issues from the conference. The recommendations were prepared with reference to two recent comprehensive reports: *Report of the Secretary's Task Force on Youth Suicide* (USDHHS, 1989) and *Indian Adolescent Mental Health* (OTA, 1990).

Epidemiology

Indian Adolescent Mental Health stated that

> suicide is perhaps the most tragic manifestation of mental health problems among Indian/Native adolescents. Suicide is the second leading cause of death for these adolescents. In 1986, the age-specific mortality rate for suicide of 15- to 19-year-old Indians was estimated to be 26.3 deaths per 100,000 population. In comparison, the figure for the same age group for U.S. all races was 10.0 per 100,000 population. Suicide deaths for 10- to 14-year-olds are approximately four times higher than for U.S. all races. (OTA, 1990)

This document also reports that the 1986 age-specific suicide mortality rate for 15- to 19-year-old Indians was 26.3. Although this represented a decrease from 30.9 in 1980, there was an increased rate from 0.0 to 6.9 for ages 10 to 14. The rates for Indian males exceeded those for females 9 to 1. However, suicide deaths for females climbed from 2.1 in 1980 to 9.0 in 1985, then dropped to 2.3 in 1986. The report confirmed that cultural-specific and regional patterns of suicidal risk for American Indian and Alaska Native adults also strongly influence adolescents. For example, in 1988, the percentage of IHS and contract hospital discharges

for Indian adolescents involving a suicide ranged from a low of 3.1% to a high of 15.5% in various IHS regions, demonstrating a fivefold regional and tribal variability.

Previous Research

Shore and Manson (1983) summarized multiple psychosocial and psychiatric issues in regard to adolescent suicide. Berlin (1985, 1986) published comprehensive literature reviews concerning psychopathology and its antecedents among Indian adolescents and concepts of suicide prevention. May developed an annotated bibliography identifying 132 articles on Indian suicide (May, 1987a) and later May (1987b) published the most comprehensive overview on this subject. The most up-to-date summary of Indian adolescent suicide epidemiology is contained in the 1990 publication from the Office of Technology Assessment (OTA, 1990).

Reports of preventive interventions also can be found in the literature (Manson, Beals, Dick, & Duclos, 1989; Pambrun, 1970; Shore, Bopp, Waller, & Dawes, 1972). Shore (1975) emphasized the tribal-specific nature of Indian suicide. Throughout the 1970s and 1980s, authors consistently focused on the rising problem of youth suicide, reinforcing concern for high-risk cohorts, tribal specificity, and epidemic patterns (Dizmang, Watson, May, & Bopp, 1974; Frederick, 1984). Levy made a special contribution by articulating key theoretical issues that might significantly influence adolescent suicide in his classic description of Indians, social pathologies, and anomie (Levy & Kunitz, 1987). In defining social pathologies, he described a spectrum of mortality patterns including suicide, homicide, and alcohol cirrhosis.

Indian adolescent suicide epidemics have been common. However, few have been studied systematically or reported in the literature (Ward & Fox, 1977; Pambrun, 1970; Long, 1986). Bechtold's (1988) article is the most detailed communitywide case study of these epidemic patterns. This article and one by Dizmang et al. (1974) stand alone in the literature with a focus on case analyses of Indian adolescent suicides. Given the extent of the problem, this small number of studies demonstrates a significant deficit of research with respect to Indian adolescent mental health issues. In addition to suicide epidemics, the importance of co-morbidity of suicidal behavior and substance abuse is reported in almost every article concerning Indian adolescent suicide. Yet systematic research on co-morbid diagnostic patterns of psychiatric disorders also is notably missing.

In reviewing this literature, I was impressed with the absence of individual case reports. There is only one published case report on adolescent suicide in May's annotated bibliography (1987b). This case report by Blanchard, Blanchard, and Roll (1976) focused on reservation upbringing, family history of alcoholism, and adolescent turmoil. Issues of cultural

and family disintegration were identified as major precursors of the particular suicide under study. Certainly, one case report represents an inadequate effort by the field to share and learn from these tragic examples. This, again, raises an important policy question: Is this failure caused by inadequate research advocacy or funding, insufficient and irrelevant research manpower, and/or difficulties for the clinical researcher in the transcultural settings of Indian and Native communities?

Indian boarding schools, with their regionally unique referral patterns and special school-based treatment initiatives, have been a source of continuous interest for adolescent adjustment. Twenty-one percent of the interventions identified by Manson et al. (1989) were school-based and emphasized early identification of mental health problems and reduction of specific risk factors such as substance abuse. Several model residential treatment substance abuse programs have been developed since the early 1970s, most recently with special initiatives funded by Congress and the IHS. However, the referral patterns to boarding schools remain an area of special concern and interest, since placement in certain settings continues to be influenced primarily by accumulating high-risk factors.

Risk Factors for Youth Suicide

Multiple risk factors can be identified that are significant for American Indian and Alaska Native adolescent suicide. These factors are outlined in Table 12–1 along with associated reports that are Indian-specific. They include cultural- and tribal-specific issues, familial factors, co-morbidity, cluster suicides, and behavior contagion. This outline of risk factors is drawn from my own experience and two literature sources, the 1989 USDHHS publication *Report of the Secretary's Task Force on Youth Suicide* and *Suicide Over the Life Cycle: Risk Factors, Assessment and Treatment of Suicidal Patients,* by Blumenthal and Kupfer (1990).

Pre-existing psychiatric disorders and co-morbid patterns as risk factors were discussed during the conference, with specific attention to conduct disorders, impulsive aggression, antisocial behavior, and co-morbidity with alcohol and substance abuse, anxiety, and depression. A history of previous suicidal behavior is another identifiable risk factor. In addition, the issue of stress with American Indian youth is another significant associated factor, including frequent deaths, auto accidents, family members dying, and recurrent episodes of grief. Family issues include psychiatric disorder (specifically, substance abuse), suicidal behavior, parental loss, multiple caretaker, and violence and abuse. These associated events also must be understood in the complex cultural and political environment of Indian communities. An important factor addressed during this conference that has not been emphasized in the literature is risk associated with certain high-risk settings. This was much clearer when I first began work in the 1960s. The referral process to boarding schools

selected high-risk Indian youth. This remains an important variable for certain schools and tribes, although at the present time it is a less common referral practice.

Table 12–1
Risk Factors for Indian Adolescent Suicide

Risk Factors		Indian-Specific Reports
Psychiatric Disorders:		
psychosis	personality disorder	Berlin (1986)
any disorder	past psychiatric treatment	Manson (1989)
substance abuse	high suicidal intent/lethality	Frederick (1984)
bipolar disorder	past suicidal threats or behavior	Shore & Manson (1983)
conduct problems	affect disorder with comorbidity	Swanson et al. (1971)
affective disorder		
Previous Suicidal Behavior		Shore & Manson (1983)
Impulsive, Aggressive and Antisocial Behavior		Berlin (1986), Dizmang et al. (1974) Frederick (1984) Dizmang et al. (1974)
Severe Stress		
Family Factors:		
psychiatric disorder	parental (figure) loss	Blanchard et al. (1976)
substance abuse	absence	Dizmang et al. (1974)
affective	abuse	Shore & Manson (1983)
suicidal behavior	multiple caretaker	Manson et al. (1989)
violence		

Table 12–1 (Continued)
Risk Factors for Indian Adolescent Suicide

Risk Factors	Indian-Specific Reports
Homosexuality	
Contagion	Bechtold (1988), Dizmang et al. (1974) Long (1986), May (1987a), Shore & Manson (1983), Ward & Fox (1977), Manson et al. (1989)
Access to Lethal Methods	
Sociocultural Issues/Rapid Change	Berlin (1986), Long (1986) Green et al. (1981), Shore (1975) Levy & Kuntz (1987), Manson et al. (1989)
Media Emphasis:	
Biomedical:	Levy & Kuntz (1987)
perinatal stress	
epilepsy	
neurotransmitter	
low 5-HIAA and HAV	
Accidents	Frederick (1984), May (1987a)
Settings:	
schools (boarding)	Manson et al. (1989)
jails (institutions)	

The federal report on youth suicide organized recommendations for action into six broad categories: (a) data development, (b) research into risk factors for youth suicide, (c) evaluation of interventions to prevent

youth suicide, (d) suicide prevention services, (e) public information and education, and (f) broader approaches to preventing youth suicide (USDHHS, 1989).

Each of these recommendations has specific relevance for American Indian and Alaska Native adolescent suicide. For example, the report recommends development of uniform criteria for defining suicide, community-based surveillance systems for suicide attempts, and the identification of unusual suicide patterns. It also recommends a specific suicide screening instrument for adolescents. This screening instrument example could be modified for cultural sensitivity and utilized with the American Indian and Alaska Native population. It particularly could be useful for case identification, referrals, and research. In addition, two of the six recommendations in the secretary's report emphasize prevention.

Table 12–2 lists public policy recommendations from the secretary's task force. It provides a comprehensive frame of reference for developing recommendations for Indian/Native adolescent suicide research.

The first recommendations were for research in 15 areas. Surveillance data, definitions, instrumentation, methodology, and risk factor definition and assessment have been reviewed extensively during this conference. Basic biological mechanisms will not be pursued extensively in the near future in American Indian adolescent field research. That research will be done in the major health sciences centers, but we can certainly draw from those findings. Genetic factors also will be explored within the next decade. The clinical and biological technologies are developing to permit careful, detailed family case studies. Psychosocial studies with the application of systematic diagnostic interviews are being planned to explore the relationship of psychiatric and personality disorders. Protective factors are important; e.g., American Indian culture that is positive and a shield for high-risk children. Additional studies of suicide clusters with new methodologies also are relevant to the American Indian experience.

There were four recommendations under the heading of education and training. We have discussed the development of focused clinical training curricula. Problems of consistency and completeness of current training programs are apparent. Broad-based training programs, media education, enhanced awareness, and coalition building all are emphases supported by this conference.

There are eight policy recommendations for suicide prevention and interventions. In American Indian communities, there has always been a significant interest in these types of programs. Establishment of a suicide prevention data bank, study of preclinical prevention interventions, and high school education prevention programs are all a part of a comprehensive approach. Several current models are reviewed in these proceedings. However, there are few in-depth evaluation studies of prevention programs. In their comprehensive review, Manson et al. (1989)

Table 12–2
Pubilc Policy Recommendations

ADAMHA Youth Suicide Task Force Report
For Research:
Suicide Surveillance Data
Definitions of Suicidal Behavior
Instrumentation and Methodology
Multidisciplinary Research
Risk Factor Definition and Assessment
Basic Biological Mechanisms
Genetic Factors
Psychosocial Studies
Association with Psychiatric and Personality Disorders
Association with Medical Illnesses
Co-morbidity
Protective Factors
Suicide Clusters
Treatment Research
Research Advocacy
For Education and Training:
Clinical Training Curricula
Broad-Based Training Programs
Media Education
Enhanced Awareness and Coalition Building
For Prevention and Interventions:
Establishment of a Suicide Prevention Data Bank
Studies of Preclinical Preventive Interventions
High School Education Prevention Programs
Evaluation Studies
Preventive Interventions in Primary Health Care Settings
Service Utilization Research
Development of Community Suicide Response Plans
Suicide Prevention Advocacy

uncovered mostly programmatic descriptive reports but little systematic evaluation. In populations where research is suspect, "evaluation" is a safer term, especially as it involves program effectiveness. The term "evaluation" is used currently in Indian country rather than "research," because it is associated with less stigma and less community resistance. How do the tribes and mental health professionals address needed research without excessive stigmatization? Fear of stigmatization has reinforced the avoidance of research for 20 years. This stigma deserves open discussion between the tribes and mental health professionals. It is more important than often is acknowledged.

The task force emphasized the importance of preventive interventions occurring in primary health care settings. Screening and high-risk identification methods should be included in attempts to educate general medical officers and other health personnel working in IHS service units and hospitals. Service utilization research and the development of community suicide response plans have been recommended by Blumenthal and Kupfer (1990). Gun control and decreased availability of weapons are politically controversial in Indian as well as non-Indian communities. It is difficult to impose gun restriction on a hunting culture, yet public health data cross-culturally and internationally overwhelmingly demonstrate an association between firearms, homicide, and suicide. Pfeffer (1989) presented a summary of the opinions of 15 suicide experts nationally when they were asked to estimate the effectiveness of various interventions. Beginning with the most effective intervention, they are (a) the restriction of access to firearms, (b) the identification of high-risk youth, (c) the improvement of treatment, (d) prior treatment, (e) the institution of school-based screening, (f) the development of crisis centers and hotlines, (g) effective education, and (h) the restriction of access to medication and high places.

Conclusions

In conclusion, let me summarize several important themes, starting with some reflections on the research dichotomy that is prominent in American Indian mental health programs, specifically as it pertains to the issue of adolescent suicide. This dichotomy has been defined as the contrast between ethnoscience and "the other" science, a biomedical approach. We are in an era of tremendous strides in biomedical science. For instance, through case register methods we can identify high-risk individuals with certain morbidity patterns, specifically adolescent suicide. We have heard of model programs from an ethnoscience perspective that emphasize cultural sensitivity and imaginative partnerships between health professionals and Indian communities. We must attempt to integrate this with a biomedical model, creating a balanced and

broader biopsychosocial perspective. An ethnoscientific or biomedical approach alone will lead us to a lot of mistakes.

Another dichotomy between research and program evaluation also has been highlighted. Why separate research and evaluation? There is a fear of the resistance to research from American Indian communities that is long-standing. It is an important issue to identify, discuss, and understand. There are many obstacles that we face as mental health researchers. We suffer from the old anthropologist's stigma: In every Navajo hogan, there are grandparents, parents, children, maybe great-grandchildren, and an anthropologist. Now, said in jest, it also conveys a certain hostility. All health professionals who approach Indian country with the notion of doing research encounter these feelings. If you are not prepared to deal with them, you should not go. These different theoretical assumptions and approaches are not incompatible. They can be integrated, not polarized. This is not an adversarial discussion between those who ascribe to ethnoscience models or biomedical models. Each perspective is absolutely essential. If these workshop proceedings cannot successfully integrate these models, then no other group in Indian country will succeed. Relevant research to this point is primarily descriptive, not analytic. More data-based, analytic research is needed. In addition, we have not effectively utilized the current knowledge from adolescent suicide research. We need to ask how current knowledge might more effectively be disseminated while retaining an emphasis on unique American Indian cultural issues.

Special issues of confidentiality must be dealt with, not just for patients, but for communities. As researchers, we must develop methods to feed back data in a way that is useful to Indian communities. We also have an obligation to publish responsibly. One of the influences that has excluded universities from Indian communities is the difficulty obtaining permission to publish. This is for a very good reason. Many publications have been insensitive, have labeled and stigmatized communities. Universities sometimes suffer from "ivory tower" isolationism and irrelevance of the research questions asked. Researchers continually must be concerned about relevant feedback to communities whether or not the communities want to use the data.

At the same time, support networks are critical for both the Indian and non-Indian researcher. Criticism and isolation may be even harder on younger Indian researchers who are just beginning their careers. They feel out of their element. The community will bring them back to reality. Dr. Guilmet captures this when he said, "You are no one unless you can start a rumor; you are no one unless you've been rumored about."

Occasionally in this work, I have the fear that we have regressed to the community psychiatry movement of the 1960s. It was an era characterized by lofty goals and aspirations, associated with unrealistic expectations and disappointing outcomes. If this concern is so, suicide

researchers may suffer the same fate for being so diffuse and grandiose that we again will be unable to demonstrate effective outcomes. If we are not wise enough to focus these efforts and to demonstrate an effective outcome, the initiatives will fail. That failure will affect the credibility of the suicide prevention effort on both local and federal levels. Unfortunately, many mental health prevention efforts of the 1960s and 1970s have dissipated because of this failure.

These proceedings have emphasized the development of goals for national research priorities that hopefully will avoid past failures. The challenge is for a more clearly focused research agenda and a renewed commitment by all on behalf of American Indian and Alaska Native adolescents.

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