

# CLUSTER SUICIDE IN AMERICAN INDIAN ADOLESCENTS

DONALD W. BECHTOLD, MD

**ABSTRACT.** Death by suicide has been a growing problem among teenage and young adult males over the last 2 decades. The tendency for such suicides to occur in clusters (serial suicides related in time and space, and etiologically related through the process of imitation) has concurrently increased. The general characteristics of adolescent suicide are reviewed here, as are the special characteristics of cluster suicide, and the culturally specific patterns of suicide among Indian people. A suicide cluster among teenage and young adult males of a Plains Indian tribe is described, and clinical implications for intervention strategies during a suicide cluster are discussed.

## General Characteristics of Adolescent Suicide

Over the past 30 years, suicide has become an increasingly serious problem among American children and adolescents. Suicide is now the third most common cause of death among people between the ages of 15 and 24, and suicide rates have approximately tripled in the last 30 years. By the year 1980, more than 5,000 teenage suicides were occurring annually, and the suicide rate among individuals in the 15-24 year age group was in excess of 12 per 100,000. This trend toward increases in both base rate and absolute number of suicides has continued into the 1980s. The greatest increase in completed suicides has occurred among young White males; the suicide rate for females has not increased significantly and suicide rates among those older than 30 years of age have declined somewhat in the same period of time (Centers for Disease Control, 1986; Shaffer & Fisher, 1981).

Despite the growing magnitude of the problem, "there is a lack of systematic research on completed suicide in childhood and adolescence" (Shafii, Carrigan, Whittinghill, & Derrick, 1985). Shaffer concurs as he states, "published reports on successful suicide in childhood mainly take the form of commentaries on official statistics, with emphasis on age and sex characteristics and suicidal method" (Shaffer, 1974). While the literature is replete with data concerning suicidal ideation and incomplete suicides among adolescents, only a few investigators have followed the perspective of Robins, Murphy, Wilkinson, Gassner, and Kayes (1959) who first pointed out that only a study of nonselected consecutive suicides could evaluate for premorbid characteristics that might be helpful in predicting suicide (Amir, 1973; Jan-Tausch, 1964; Sathyavathi, 1975; Schaffer, 1974; Shafii et al., 1985). The findings derived from the majority of these studies have served to further the understanding of the demographic-diagnostic profile(s) of the victims, and have focused largely on life events, personality characteristics, and family circumstances which were juxtaposed in time to the suicides.

---

AMERICAN INDIAN AND ALASKA NATIVE MENTAL HEALTH RESEARCH  
1(3), MARCH, 1988, pp. 26-35.

Findings of commonality among adolescent suicide victims have included Shaffer's observation of physical and intellectual developmental precocity in early adolescent suicide victims (1974), and in the life-experience familiarity with the phenomenon of suicide itself (Shaffer, 1974; Shafii et al., 1985). Rotheram (1987) listed "male sex, a (one) past attempt with a method other than ingestion, more than one previous attempt (any method), a history of antisocial behavior, having a close friend who committed suicide or a family member who attempted suicide, frequent drug and alcohol use, depression, and incompatibility with the social environment" as statistically based factors which make a clinical prediction regarding suicide.

#### Special Characteristics of Adolescent Suicide: The Phenomenon of Clustering

Concurrent with the increase in the base rate of adolescent suicide has been the observation of its increasing tendency to occur in clusters, which have been defined as any series containing more than three deaths, closely associated in space and time (Coleman, 1986). Since 1966, clusters have been reported among adolescents in such geographically and socioculturally varied locales as Berkeley, California; Fairfax County, Virginia; Cheyenne, Wyoming; Groveport, Ohio; Plano, Texas; Clear Lake, Texas; Westchester, Rockland, and Putnam Counties, New York; Leominster, Massachusetts; Lewis and Clark Counties, Montana; Wind River Reservation, Wyoming; Tokyo, Japan; Mankato, Minnesota; Omaha, Nebraska; Jefferson County, Colorado; Spencer, Massachusetts; and Union County, South Dakota. A recent and well-publicized example of a cluster of teenage suicides was precipitated when four teenagers asphyxiated themselves in a Bergenfield, New Jersey garage. In the ensuing 9 days, 10 more teenagers (7 in Illinois, one each in Nebraska, New Jersey, and Washington) committed suicide by similar means. Shortly thereafter, two other teenagers attempted suicide by the same means in the same Bergenfield garage where it all began. Within 2 weeks of the original Bergenfield deaths, 22 teenage suicides by similar means had occurred nationwide (Coleman, 1987).

While much remains to be learned about the phenomenon of cluster suicides, two important factors are apparent at the present time. First, the phenomenon is largely limited to adolescents (adult suicide clusters have not been prominent in recent history) and that in spite of the 4:1 preponderance of the male to female suicide ratio, clustering appears more strongly among females than among males (Phillips & Carstensen, 1986). Second is that imitative behavior appears to be a major link between serial suicides in a cluster and that the process of imitation may be spurred either by personal knowledge in a relatively closed community or by media coverage across a large segment of the population. Teenage suicides have been shown to increase and cluster after television news stories

about suicide, television soap opera suicide stories, television movies which dramatize suicide, and front-page newspaper reports of suicide (Gould & Shaffer, 1986; Phillips, 1979, 1982; Phillips & Carstensen, 1986). Significant increases in single-car auto fatalities following media coverage of suicide have been demonstrated as well (Phillips, 1979, 1982). Even though the link between imitative clusters of adolescent suicides following fictional television movie dramatizations of suicide has recently failed to replicate in a different geographic locale (Phillips & Paight, 1987), the relationship between nonfictional media coverage of suicide and imitative adolescent suicides appears largely irrefutable.

### Culturally Specific Patterns of American Indian Adolescent Suicide

Most of the review of the current understandings of adolescent suicide described above has been derived across cultures, or in cultures largely distinct from American Indian communities. In considering the culturally distinct subset of American Indian adolescent suicide completers, several factors must be considered. While overall suicide rates among American Indians remain high, there is great variation based on gender, age, socioeconomic status, and geographic and tribal-specific factors. Foulks and Wintrob (1987) provide a useful overview of these cultural specificities across tribes spanning the entire United States. Peters (1981) reviewed the medical, psychological, and anthropological literature on suicidal behavior of American Indians, Canadian Natives, and Alaska Natives. Shore (1975) cited tribal-specific annual suicide rates ranging from 8 to 120 per 100,000 and argued against the stereotype of "the suicidal Indian." The age-specific pattern of suicide among American Indians is especially important when the population in question is reduced to the adolescent subset. Contrary to age-specific rates for "all races" which peak in the 55-64 age range, suicide rates for American Indians peak in the 15-24 age range at which time the American Indian rate is several times greater than the national rate (Ogden, Spector, & Hill, 1970). Regarding gender specificity, Ogden et al. further described the male predominance of suicide among American Indians to exceed the male predominance of suicide across all subsets of the population as a whole.

While there is an extensive and growing literature on American Indian suicide, less has been done specific to the adolescent subset of this population, especially in terms of systematic and controlled research regarding completed suicide. Studies to date have been largely descriptive, demographic, and epidemiologic. Shore, Bopp, Waller, and Dawes (1972) and Dizmang, Watson, May, and Bopp (1974) in describing a common database of completed adolescent suicide over an 8-year period of time on a Pacific Northwest Indian reservation found the suicide group to be differentiated from the control group by several factors related to an

unstable home environment and greater instability of family relationships. Blanchard, Blanchard, and Roll (1976) presented a single case study of a completed adolescent suicide in a Southwestern Indian tribe in the style of a psychological autopsy. Miller (1979) described an epidemiologic study of completed suicides on a Southwestern Indian reservation in which the modal suicide victim was found to be a male under the age of 30. Curlee (1972) in studying suicide at the Cheyenne River Reservation related suicide among youths and "suicide equivalents" (alcoholism, violence, disregard for health) among adults to poor socioeconomic conditions, culture transition conflicts, and low self-esteem. Resnik and Dizmang (1971) added the variables, among Indian suicide victims they studied, of widespread unemployment and high individual alcoholism rates. Watson (1969) in reporting on the epidemic at Fort Hall, Idaho, implicated the variables of publicity surrounding suicidal behaviors and social learning (imitation) in the perpetuation of subsequent suicidal behavior. As noted earlier, these two important factors have been corroborated time and again related to the phenomenon of adolescent cluster suicides. Berlin (1987) in his overview describes a series of "critical cultural factors in the etiology of Indian adolescent suicide." Included among these are failure to adhere to traditional ways of living and traditional religions, parental unemployment and alcoholism, and adoption into Anglo families. May (1987) in his review of suicide and self-destructive behaviors among American Indian youths points out that while they derive from largely independent populations, there is significant overlap between youths who attempt suicide, complete suicide, and are involved in single vehicle crashes, the areas of overlap being considered at times as "para-suicide."

#### Cluster Suicide in a Plains Indian Community<sup>1</sup>

During the 1980s, a series of suicides occurred among the teenagers and young adults of a Plains Indian community. The community is geographically remote, being several hundred miles from the nearest major city. It is further unique in that it is home to multiple tribes, the total population numbering several thousand individuals. Unemployment has been reported at approximately 80%. The annual suicide rate is known to be somewhat high, approximately 50 per 100,000; that is, approximately two to three suicides occur each year on the average. The occurrence of nine consecutive suicides over an 8-week period of time was altogether unexpected for the residents of this community, however.

The nine suicides provide an example of a suicide cluster, a series of suicides approximated in place and time, and related to each other in one or more ways. Additionally, it provides an example of a suicide cluster in an American Indian community, and as was previously described there are culturally specific factors related to age, gender, tribe, and other variables that distinguish American Indian suicide patterns from patterns across cultures.

The demographics of the cluster were as follows. All of the victims were males. All of the victims were teenagers or young adults. All of the victims except one were members of the same tribe. All of the victims died by hanging. In addition to the nine suicides over the 8-week period of time, there were four additional suicides in the community in the same year (one before and three after the cluster). Those four victims were also young males, of the same tribe and all died by hanging.

A retrospective review of the victims' histories revealed the presence of some of the risk factors known to predict suicide among adolescents. The early teenage victims tended to be physically and intellectually well developed. All of the victims in the midst of a cluster in a closed community had significant exposure to, and personal experience with, the phenomenon of suicide itself. All of the victims were male. Alcohol was acutely involved in half of the suicides, and chronically involved in a higher percentage.

Further review of the victims' histories revealed the presence of some of the risk factors described as common to American Indian adolescent suicide. The young male profile of the modal victim was consistent with the age and gender pattern of Indian suicide. Instability of family relationships and home environment was commonly observed. Individual and parental alcoholism and unemployment were significantly represented. There was widespread recognition within the community that traditional ways were failing to be maintained over time.

Most apparent in review of the victims' histories, however, was the definite and striking presence of interrelationships among the victims (Figure 1). These were not a series of independent and unrelated suicides, but rather a definite cluster, related not only in space and time but etiologically as well. While certain known risk factors were present in some of the victims, other victims manifested no known risk factors except personal ties to earlier victims in the cluster. In these individuals, the major etiologic risk factor appeared to be the imitation of suicidal behavior.

Victim 2 died 2 weeks after victim 1. He was a good student and had been a pall bearer at the funeral of victim 1. His girlfriend was victim 3's first cousin. Victim 3's girlfriend was victim 1's sister. Victim 3 died 4 days after victim 2. Victim 4 died 1 month after victim 3. He was friend of victim 3's mother. Victim 5 died the same day as victim 4. He had no overt relationships with any



of the previous victims, however, appeared to have been influenced by media coverage of the earlier suicides. Victim 6 died 2 days after victims 4 and 5. He was good friends with victims 1 and 3, had stayed previously with the family of victim 3 and had attended the wake of victim 1 with victim 3 and victim 3's girlfriend (victim 1's sister). Victim 7 died 1 day after victim 6. He was a good student and had no known suicide risk factors except having been close friends with victim 3. Victim 8 died 2 days after victim 7. He was friends with victims 1, 4, and 6. Victim 9 died 3 days after victim 8. He had no known risk factors except being a first cousin to victim 2.

Additional cluster ties can be described as well. Victim 1 died 2 months after the last previous suicide (victim A) in the community. Victim A's wife was a first cousin to victim 3. Three weeks after the death of victim 9, victim B hung himself away from the community. Nonetheless, victim B was a member of the involved tribe and was a young male. He was acquainted with the other victims in his age group and had been back to the community the week previously. He had closely followed the heavy media coverage in the community where he was then residing. Victim C was a young male from the involved tribe who hung himself 2 months after victim 9. Victim D was also a young male from the involved tribe who hung himself 4 months after victim C. Victims C and D were brothers.

### Implications

Much has been written about adolescent suicide prevention strategies in the general population. Specific to American Indian communities, less has been written, and in particular there is a paucity of literature surrounding intervention strategies during a suicide cluster. The experience of this community provides a number of empiric clues regarding the development of an intervention strategy. The first stage in this community's strategy was to describe the characteristics of the modal victim. Mental health resources were limited in this as in most communities, and individual outreach to each member of the community could not be accomplished. The highest risk profile needed to be delineated, refined, and reduced until a more workable number was achieved. The limited mental health resources could then be prioritized and delivered first to those at highest risk for perpetuating the cluster.

In this case, all females could be eliminated from the highest risk profile. Strengthening this assumption was the knowledge that among Indians even more than the population at large, suicide is most often a male phenomenon. (At the present time, several years after the suicide cluster, there have been no subsequent female suicides.) Members of all tribes except one could be eliminated from the highest risk profile. Only a single suicide had occurred

outside of that tribe; 12 of the 13 suicides occurring in the community that year were members of the one tribe. Male members of the involved tribe could be excluded from the highest risk profile if they were outside the age parameters of 13 and 28; all the suicides occurred within those parameters. The age-specific pattern of Indian suicide added further support. (All subsequent suicides in this community have continued to fall within those age parameters.) The highest risk profile was defined as a male from the one tribe whose age was between 13 and 28. Any individual fitting that profile was a prioritized recipient of mental health services.

Prioritization could be refined even further, however, by review of the interpersonal networks of the victims. As was described, the interrelationships among the victims' networks were marked. It was clear that the risk of any individual in the highest risk profile was increased if he was in the interpersonal network of any of the victims. The more networks he was in, the greater the enhancement of his risk. Stated another way, the greater the similarity between an individual and a victim, and the greater that individual's exposure to suicidal behavior, the greater the likelihood of his imitating that suicidal behavior in the midst of a suicide cluster.

In conclusion, the lessons to be learned from this experience include the following. Practitioners in Indian communities need to acquire an understanding of the risk factors for adolescent suicide. They further require an understanding of the culturally specific pattern of Indian suicide. They must be aware that cluster suicide is a phenomenon that cuts across culture and borrows from both databases. Traditional prevention strategies are not applicable and perhaps contraindicated in the midst of a cluster. A cluster must be recognized and identified at its earliest possible point. Intervention strategies require elucidation of the highest risk profile and prioritization and delivery of mental health resources to those at highest risk for perpetuating the cycle through imitation. The contagion associated with suicide clusters provides them a life unto themselves. Young lives can be saved by breaking the self-perpetuating cycle before it runs its natural course.

Department of Psychiatry  
University of Colorado Health Sciences Center  
4200 East Ninth Avenue  
Denver, Colorado 80262

Note

1. Minor details have been altered to respect the confidentiality of the community and families involved. The salient principles, however, remain unaffected.

References

- Amir, A. (1973). Suicide among minors in Israel. *Israel Annals of Psychiatry and Related Disciplines*, 11, 219-269.
- Berlin, I. N. (1987). Suicide among American Indian adolescents: An overview. *Suicide and Life-Threatening Behavior*, 17(3), 218-232.
- Blanchard, J. D., Blanchard, E. L., & Roll, S. (1976). A psychological autopsy of an Indian adolescent suicide with implications for community services. *Suicide and Life-Threatening Behavior*, 6(1), 3-10.
- Centers for Disease Control. (1986). *Youth suicide in the United States, 1970-1980*. Atlanta, GA.
- Coleman, L. (1986). Teen suicide clusters and the Werther effect. *The Network News*, 3, 1-6.
- Coleman, L. (1987). Beyond Bergenfield: Making sense of suicide clusters. *The Network News*, 7, 1-3.
- Curlee, W. V. (1972). Suicide and self-destructive behavior on the Cheyenne River Reservation. In *Suicide among the American Indians: Two workshops* (pp. 34-37). Washington, DC: DHEW Publication.
- Dizmag, L. H., Watson, J., May, P. A., & Bopp, J. (1974). Adolescent suicide at an Indian reservation. *American Journal of Orthopsychiatry*, 44(1), 43-49.
- Foulks, E. F., & Wintrob, R. (1987). Suicide in Native Americans. Unpublished manuscript.
- Gould, M. S., & Shaffer, D. (1986). The impact of suicide in television movies: Evidence of imitation. *New England Journal of Medicine*, 315, 690-694.
- Jan-Tausch, J. (1964). *Suicide of children 1960-63*. Trenton, NJ: New Jersey Public Schools, Department of Education.
- May, P. A. (1987). Suicide and self-destruction among American Indian youths. *American Indian and Alaska Native Mental Health Research*, 1(1), 52-69.
- Miller, M. (1979). Suicides on a Southwestern American Indian reservation. *White Cloud Journal*, 1(3), 14-18.
- Ogden, M., Spector, M. I., & Hill, C. A. (1970). Suicides and homicides among Indians. *Public Health Reports*, 85(1), 75-80.
- Peters, R. (1981). Suicidal behavior among Native American: An annotated bibliography. *White Cloud Journal*, 2(3), 9-20.
- Phillips, D. P. (1979). Suicide, motor vehicle fatalities, and the mass media: Evidence toward a theory of suggestion. *American Journal of Sociology*, 84(5), 1150-1174.
- Phillips, D. P. (1982). The impact of fictional television stories on U.S. adult fatalities: New evidence on the effect of the mass media on violence. *American Journal of Sociology*, 87(6), 1340-1359.
- Phillips, D. P., & Carstensen, L. L. (1986). Clustering of teenage suicides after television news stories about suicide. *New England Journal of Medicine*, 315, 685-689.
- Phillips, D. P., & Paight, D. J. (1987). The impact of televised movies about suicide: A replicative study. *New England Journal of Medicine*, 317, 809-811.
- Resnik, H. L. P., & Dizmag, L. H. (1971). Observations on suicidal behavior among American Indians. *American Journal of Psychiatry*, 127(7), 882-887.
- Robins, E., Murphy, G. E., Wilkinson, R. H., Jr., Gassner, S., & Kayes, J. (1959). Some clinical considerations in the prevention of suicide based on a study of 134 successful suicides. *American Journal of Public Health*, 49, 888-899.

- Rotheram, M. J. (1987). Evaluation of imminent danger for suicide among youth. *American Journal of Orthopsychiatry*, 57(1), 102-110.
- Sathyavathi, K. (1975). Suicide among children in Bangalore. *Indian Journal of Pediatrics*, 42, 149-157.
- Shaffer, D. (1974). Suicide in childhood and early adolescence. *Journal of Child Psychology and Psychiatry and Allied Disciplines*, 15, 275-291.
- Shaffer, D., & Fisher, P. (1981). The epidemiology of suicide in children and young adolescents. *Journal of the American Academy of Child Psychiatry*, 20, 545-565.
- Shafii, M., Carrigan, S., Whittinghill, J. R., & Derrick, A. (1985). Psychological autopsy of completed suicide in children and adolescents. *American Journal of Psychiatry*, 142(9), 1061-1064.
- Shore, J. H. (1975). American Indian suicide--fact and fantasy. *Psychiatry*, 38, 86-91.
- Shore, J. H., Bopp, J. F., Waller, T. R., & Dawes, J. W. (1972). A suicide prevention center on an Indian reservation. *American Journal of Psychiatry*, 128(9), 1086-1091.
- Watson, J. (1969). The etiology of suicide at Ft. Hall. *U.S. Senate Committee on Labour and Public Welfare, Part 5, Special Subcommittee on Indian Education* (pp. 2367-2371). Washington, DC.

### Publication Announcement

*New Directions in Prevention among American Indian and Alaska Native Communities*, edited by Spero M. Manson, Department of Psychiatry, University of Colorado Health Sciences Center.

This monograph reports the proceedings of a special working conference with contributions by authors who work in a diverse array of institutional settings. The state of prevention is considered with respect to five areas, research, training, services, program evaluation, and recommendations for prevention research planning. According to Dr. Stephen Goldston, Director, Office of Prevention, National Institute of Mental Health, "the papers in this monograph and the accompanying discussion sections, as well as new, thoughtful approaches for research efforts directed to other special populations. The rapidly accumulating prevention research knowledge base is significantly enriched by the material contained in this monograph."

To order, send check or money order in the amount of \$14.95 plus \$2.50 for postage and handling, payable to:

UCHSC/National Center/New Directions in Prevention

Department of Psychiatry  
Campus Mail Box C249  
4200 East Ninth Avenue  
Denver, Colorado 80262