

## Navajo Peyote Use: Its Apparent Safety

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*An American Indian religion uses significant quantities of peyote, a hallucinogenic plant containing mescaline. Since there have been many reports of serious emotional disturbance caused by similar drugs, the rate of such illness in this population was investigated. The rate was found to be very low, probably because the feelings evoked by the drug experience are channeled by church belief and practice into ego-strengthening directions and there are built-in safeguards against bad reactions.*

A LARGE GROUP of Americans has been using sizable quantities of a hallucinogenic drug for many decades. The Native American Church of North America is a religious group of Indian people of almost all tribes who believe that the hallucinogenic cactus plant peyote (*Lophophora Williamsii*) is a God-given sacrament and who eat significant amounts of it during religious ceremonies. Their practices are now attracting a certain amount of popular, official, and scientific interest because of the growing concern over the use of hallucinogens by students and others in the population at large. The main source of this new attention is fear that the ceremonial consumption of peyote may be dangerous.

It is not within the scope of this paper—nor is it necessary—to review once again the extensive literature on hallucinogenic drugs; see, for example, Hollister (1). Peyote contains more than ten alkaloids, the most psychopharmacologically significant of which is mescaline (2, 3). Although the largest number of studies on the deleterious effects of this group of drugs is concerned with LSD (lysergic acid diethylamide), the assumption is frequently made that the effects of adequate

amounts of mescaline and LSD are similar; and many of the reports are alarming. It has been speculated that the setting in which these drugs are used can have a protective effect, but Ungerleider and associates (4) and others have failed to confirm this hypothesis.

There appears to be real cause for concern about the psychological effects of peyote use, and several states have passed laws against possession and use of peyote. However, very little evidence has been reported on this subject. There is also concern that mescaline may be genetically dangerous (5). This possibility is now being investigated and will be reported later.

This paper will report the four years' experience of a mental health program serving a population including a high proportion of members of the Native American Church and will also discuss possible reasons for the relative lack of deleterious effects from their frequent ingestion of peyote.

### The Peyote Religion

The beliefs and practices of the peyote religion have been well described in detail by a number of investigators, notably Aberle, Slotkin, and La Barre (6-8). In summary, it is a Christian, pan-Indian religion identifying the Christian trinity with the Great Spirit of Indian religion and believing in the necessity of worship of God and brotherhood and charity toward all mankind. Strict abstinence from alcohol is advocated. The place of peyote is central since it is believed that God made a special gift of this sacrament to the natives of this continent in order that they might commune more directly with Him.

The services of this religion ("meetings") are highly serious and arduous. They follow a prescribed form that is derived largely from the ceremonial symbolism and practices of many tribes. A significant difference from other Christian religions is the fact that until recently all meetings were held for the purpose of praying for the cure of a sick person. This is still frequently the case, and all meet-

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ings must still have a specific purpose, such as praying for the well-being of children about to leave home for boarding school or giving thanks for the safe return of a soldier from Viet Nam.

The meetings are held in the home of one of the participating families—usually the home of the family of the patient. Any church member is welcome to join. The service is directed by a “road chief” assisted by several other officers, but all present participate almost equally. Road chiefs learn their work through an apprenticeship usually lasting several years, but they all have other occupations. There is no professional clergy.

The formal part of the meeting begins at sunset and ends at sunrise. Once it has begun everyone remains until morning. The group sits in a circle around a central altar-fireplace. The time is organized by a set order of service. After a certain point in the service, peyote is passed around the circle of worshipers and each is free to take whatever amount he wishes. This process is repeated during the night, and later each person is free to use a personal supply of medicine, which most bring with them.

Amounts of peyote used vary greatly even within one meeting. The range that my associates and I have observed and that has been reported to us is approximately 3 gm. of peyote (45 mg. of mescaline) to 30 gm. of peyote (450 mg. of mescaline). (These figures are based on Seevers' estimate that an average peyote button weighs 3 gm. and contains 45 mg. of mescaline [9].)

Much of the night is spent in the singing of religious songs: mostly Christian ideas expressed in various Indian languages and set to traditional Indian melodies. The songs are led by each person in turn and accompanied by a drum and by gourd rattles. There are also spontaneous group and individual prayers as well as many opportunities for the members of the group to address one another. Although there is some variation, portions of many meetings resemble group therapy. For example, I was present at a meeting held for a woman suffering from a mild menopausal depression. Older women present described their feelings about aging and the end of childbearing, and toward morning, the patient's husband said that he realized he was partly to blame for his wife's difficulties. He stated:

I have been so busy with church work that I don't think I've been paying much attention to my companion. It came to me during the night that the reason I've been working too hard is that I've prayed for a lot of people and sometimes they get better, but sometimes they don't, and sometimes they're grateful for what I did, but a lot of times they're not, and so I guess I began to have my doubts about religion, and the more I had doubts the harder I made myself work so I would forget about them.

The meeting ends with the consumption of symbolic foods and water, and then everyone goes outside into the early light, shakes hands, and wishes everyone else good morning. It is a moment much like that at the end of a Jewish High Holy Day service when everyone exchanges wishes for a happy new year. The participants usually remain together for several hours, talking informally, and finally they consume a big and especially good meal.

The hallucinogenic effects of peyote used during meetings seem to vary. I have interviewed approximately 200 Peyotists on this subject, and most report that they seldom experience hallucinations. The most frequently reported effects are seeing beautiful colors in the fire and hearing the singing seem to expand as though a huge chorus were performing. Frightening experiences are almost never reported.

Several people have told me of visual hallucinations occurring at times of stress. One man went to a meeting shortly after suffering an injury to his eye. He had received medical treatment but was still worried and went because he wanted to pray for his own recovery. At the time of “Midnight Water,” an important moment in the ceremony, he saw the water bucket, as it came around the circle, as a little woman walking toward him. It was a bucket again when it was passed to him, and he dipped some of the sacred water out and held it to his eye. He felt that his eye was drinking and that his pain was less after that.

### Study of the Church

My familiarity with the Native American Church has resulted from the day-to-day work of the mental health program of the Navajo area of the Indian Health Service. We are a community psychiatric service working with the 125,000 Navajo Indians, the largest tribe in the United States. Our services are

integrated with a total program of direct health care and preventive medicine that provides almost all medical services used by the community. Psychiatric consultation and direct care are available to each of the eight hospitals and clinics in the area, and we provide consultation to many community organizations, including the Native American Church. As a result, we seem to have good success in case finding, and in general there is little reluctance to refer cases to us. Nevertheless, we have seen almost no acute or chronic emotional disturbance arising from peyote use.

For a period of four years we have followed up every report of psychotic or other psychiatric episodes said to have arisen from peyote use. There have been about 40 to 50 such reports, most of which were hearsay that could never be traced to a particular case. Some have been based on a physician's belief that Navajo people use peyote and that if a particular person became disturbed it must have been for this reason. There has been one relatively clear-cut case of acute psychosis and four cases that are difficult to interpret.

#### Case Reports

*Case 1.* A man in his middle 20s went to a meeting after having had several drinks. Ordinarily, no one is allowed to participate if he has been drinking, but the road man was unaware of it in this case. After several hours and the consumption of several peyote buttons, the subject became panicky. He thought that the people in the meeting were planning to kill him, and he ran out. Attempts were made to stop him, but he got away and went home. Although he had a key, he broke into the house, cutting himself on broken glass in the process, and found a large knife that he took back to the meeting.

He threatened to kill those present, and when they moved to restrain him, he stabbed himself several times in both legs. He was taken immediately to a hospital where chlorpromazine was administered intramuscularly, and he slept for about half a day. Within 24 hours he became oriented and showed no thought disorder and only mild anxiety. He remained well for six months, during which he did not attend any more meetings; he has since been lost to follow-up.

It is noteworthy that members of the church warn that the combination of alcohol and peyote is very dangerous.

*Case 2.* An acute schizophrenic episode began in another person about the time of a meeting but, according to the patient and his family, it did not

become severe until several days later. This patient was in his early 20s, had attended many previous meetings without incident, and since his markedly successful inpatient treatment has attended many more meetings without difficulty.

*Case 3.* A 22-year-old draftsman complained of free-floating anxiety and feelings of depersonalization, which he traced to peyote meetings. He had begun attending meetings at the insistence of his wife, whom he had married six months earlier over the opposition of his family, who disapproved of her because she was a Peyotist. His symptoms decreased after he stopped attending meetings and worked out some of his feelings about the marriage.

The remaining two cases concern chronic schizophrenic patients who seem to have become acutely anxious during meetings. Many other chronic schizophrenics whom we follow attend meetings without reporting untoward effects.

#### The Peyote Experience

Some rough estimates of the rate of negative reactions to peyote can be made. The Native American Church of Navajoland estimates its membership at 40,000. This estimate may be high and there may be inactive members, so we will use a population base figure of 30,000. Our informants report attending meetings with an average frequency of about twice a month. Since this may be exaggerated, we will assume an average attendance of only once every two months. This would result in a total of 180,000 ingestions of peyote per year by the population we serve. Assuming that all five of our cases represent true reactions to peyote and that we hear about only half of the cases occurring, the resulting (probably overestimated) rate would be approximately one bad reaction per 70,000 ingestions.

This rate is much lower than others that have been reported for the use of hallucinogenic agents, and it calls for at least an attempted explanation. It is thought that the usually repressed emotions freed by hallucinogens sometimes are not integrated and cause panic or psychosis. I believe that the feelings made available in meetings are carefully channeled into ego-strengthening directions. Some of the crucial factors are a positive expectation held by the Peyotists, an emphasis on the real interpersonal world rather than the world within the individual, emphasis on communion rather than with-

drawal during the drug experience, emphasis on adherence to the standards of society rather than on the freeing of impulses, and certain practices during the meetings.

Peyotists regard peyote as a powerful and beneficial medicine. Meetings are held for curative or other beneficial purposes, and the road man is regarded as curer as well as priest. Much of the time in meetings is spent in praying for and talking about expected benefits from the drug. As in psychotherapy or any other curative ritual, this expectation seems to be an important influence.

In general, Peyotists expect that leading a good life according to their religion will result in greater personal success in the real world. Very few ever mention the possibility that their practices will increase their aesthetic sensitivity or show them a new view of the world—except perhaps a more moral one. It is quite common for a member of the church to cite examples of people who joined, became more responsible, and as a result were able to be more economically successful. In many ways, in meetings and outside them, customary social forces influence the members not to indulge in narcissistic withdrawal or grandiose fantasy.

Although a few people use peyote for religious purposes outside of meetings, this is an uncommon practice and they seldom do so alone. The whole spirit of the religion seems best characterized as communion—with God and with other men. Meetings are experienced as a time of being close and growing closer to one another. It is acceptable and expected that if someone in a meeting expresses a strong feeling, the others present feel it with him and tell him so. If there is a tendency to lose old features of one's identity, there is an equally strong tendency to acquire stronger identity as a member of the group. As a member of the church, each person is assured of his own significance and of group support for his own needs to be self-assertive in the outside world. The outside world—particularly the world of non-Indians—is seen as difficult but livable, and members expect to be able to cope with it.

Meetings are conducted in a strict and orderly way. Distortions in time sense are counteracted by the various events of the service that take place at precisely defined times of the night. Almost everything is done in a ritualized way that requires attention to

the detail of one's movements and speech. The drum, ceremonial tobacco, and other important objects are passed only in a certain way. In moving about the hogan or tepee, one walks only in a certain direction. All these details are invested with considerable emotion, and some Peyotists say that this keeps them "thinking in the right way." The ceremony is experienced as beautiful, but much of the beauty is the beauty of orderliness.

Road men are trained to look after people who become excessively withdrawn. If a participant begins to stare fixedly into the fire and seems unaware of the others, the road man will speak to him and, if necessary, go to him to pray with him. In the process of praying with him, the road man may fan him with an eagle feather fan, splash drops of water on him, and fan cedar incense over him. All of these processes are regarded as sacred and helpful, and they seem to provide stimulation in several sense modalities to draw one back to the interpersonal world. Another safeguard is the custom that no one is to leave the meeting early. Considerable effort is made to prevent someone who has been eating peyote from going off alone into the night. This factor is probably important, too, in the customary activities of the morning after the meeting. Everyone stays together and socializes until well after the drug effect is over.

### Discussion

In describing some of the ways in which the Native American Church avoids harming its members, I have also implied some ways in which I feel that it helps them. That is a subject for another and longer paper, but this one would be incomplete without saying that we have seen many patients come through difficult crises with the help of this religion. For many Indian people threatened with identity diffusion it provides real help in seeing themselves not as people whose place and way in the world is gone, but as people whose way can be strong enough to change and meet new challenges. The Peyotists themselves are proud in particular of the help the church has been to Indian people who have drinking problems. In fact, Levy and Kunitz report a greater success rate for the Peyotists than for any other agency working with alcoholics in one part of the Navajo reservation (10, 11).

There have been recent attempts to limit the freedom of the church members to practice their religion. There have been a few journalistic reports depicting them as drug abusers. Careful study is called for not only to avoid injustice but also to learn from these people who use well a potentially dangerous drug and who, after all, have had much longer experience in these matters than we have.

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#### DISCUSSION

KARI A. MENNINGER, M.D. (Topeka, Kans.)—Late in the summer of 1938 a quiet, gentle, soft-spoken young man came to see me in my old office at the Menninger Clinic. He was an anthropologist, and he had just finished a book representing a careful study of the peyote cult. He explained:

[The peyote cult] . . . is a movement among

the Indians which focuses on the use of an herb which they sit around in a circle and eat. It produces a strange elevated reflective emotional state and has become organized into a religious movement. It is so attractive to them that thousands of them engage in it and they seem to be very devout. The ceremony spread from Mexico about 1870, although the drug itself has been used there for several centuries. . . . A practical point of the matter is that the missionaries of various churches have become somewhat alarmed at the hold this ceremony has on the people and they regard the American Native Church, as it is called, as a serious competitor to the various Christian sects. Actually, there is no clear competition because the ceremony does seem to evoke religious feelings and many Indians belong to Christian sects and also to the Native Church. But the missionaries are very hostile to it. I have been studying it for three years and I think there is far more to be said for it than against it.

The book was titled *The Peyote Cult* and was number 19 in the Yale University publications in anthropology. A revised edition (referenced in Dr. Bergman's paper), printed in 1964, is a scholarly account of 25 years' additional study of this almost unique American-born religion and the drug upon which it is based.

Time after time various western states have passed laws prohibiting the use of this drug. Time after time they have been repealed or rejected by the Supreme Court. I am happy to have had a small part in some of these legal actions.

Dr. Robert Bergman, on the basis of his scientific training, confirms precisely what Weston La Barre told me long ago. Peyote is not harmful to these people; it is beneficial, comforting, inspiring, and appears to be spiritually nourishing. It is a better antidote to alcohol than anything the missionaries, the white man, the American Medical Association, and the public health services have come up with. It is understandable that these organizations should be a bit envious of the success of this primitive natural native remedy. We are indebted to our colleague for his scientific documentation and personal evaluation of what is a real preventive mental health measure.

I concur in all that Dr. Robert Bergman has said. I see the legal persecution that keeps cropping up as typical of the reactionary regression of the day.