THE PSYCHEDELIC MYSTICAL EXPERIENCE IN TERMINAL CANCER PATIENTS AND ITS POSSIBLE IMPLICATIONS FOR PSI RESEARCH

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PAHNKE: I would like to describe the application of psychedelic-drug treatment to specific pathologic conditions and discuss its possible implications for parapsychology.

I shall briefly describe our method of treatment for terminal cancer patients and shall give a summary of the data collected so far in our pilot study (see the Table pp. 118-119).[1] Two other researchers have also attempted to use LSD-assisted psychotherapy for the dying patient: one is Dr. Eric Kast in Chicago, who has treated about 200 patients;[2-5] the other is Dr. Sidney Cohen of Los Angeles.[6]

First of all, let me state that my definition of psychedelic is mind-manifesting, as Dr. Osmond proposed.[7] This includes both positive and negative experiences, so psychedelic would encompass a wide variety of possible LSD reactions.

RAO: What do you mean by positive and negative?

PAHNKE: I call the *psychotic experiences,* which are characterized by fear, disorganization, panic, paranoia, suspicion, and derangement of abstract reasoning, negative. On the positive side are (1) *aesthetic experiences,* where there are an intensification, greater awareness, and increased appreciation of sensory modalities; and (2) *psychodynamic experiences,* with abreaction, catharsis, and reliving of childhood experien-

ces, usually accompanied by a profound emotional insight. There are also (3) *cognitive experiences,* in which a person feels he can think in a new way, see things in a new light, and grasp interrelationships. This is the kind of experience which gave rise to the hypothesis that LSD may aid in creativity research. Then there is (4) the *psychedelic mystical experience,* which is the aim of our treatment. This experience is characterized by six major qualities, namely:

> First, unity, a feeling of cosmic oneness, a positive ego transcendence, without loss of consciousness and with retention of memory of the experience.
>
> Second, transcendence of time and space; in other words, an experience of timelessness, spacelessness, and eternity or infinity.
>
> Third, a positive mood which includes joy, blessedness, peace, and love at a very intense level.
>
> Fourth, a feeling of awe, wonder, sacredness, reverence, and humility.
>
> Fifth, a certainty of intuitive knowledge which William James called the "noetic" quality.[8]
>
> Sixth, a sense of ineffability.

Dr. Ludwig's definition of psychedelic therapy is similar to European psychoanalytic therapy. He is interested mainly in psychodynamics, not in the mystical experience. Our goal is the mystical experience, which we feel can have positive therapeutic consequences.

We wanted to see whether we could give terminal cancer patients a profoundly positive experience that would make their last days more meaningful and less uncomfortable and would enable them to feel less depressed and psychologically isolated.

When Kast started working with LSD, he hoped to decrease the pain associated with terminal cancer. We also looked at this aspect and assessed the amount of pain-relieving drugs needed before and after LSD.

In our pilot study, we treated six patients in various stages of the illness.[9] After having evaluated a patient psychiatrically and determined that he could tolerate the LSD procedure, we discussed our opinion with both the patient and his family, thereby receiving an informed consent. We then began intensive therapeutic work with both the patient and his family, to break down the isolation. The patients were told that our procedure was not going to cure them, but that it might give them psychological strength to cope with pain and emotional stress. We spent a total of 6 to 10 hours with each patient before administering LSD. The

drug sessions were run according to the procedure worked out for treatment of alcoholics and neurotics at the Spring Grove State Hospital in Baltimore.[10]

During the LSD session a trained therapist and a psychiatric nurse were in constant attendance for 10 to 12 hours. The usual dose was 200 to 300 micrograms. When the patient was coming out of the reaction, members of his family were allowed into the room. We encouraged as much honest personal interaction as possible. These times proved to be quite meaningful to patient and family alike. Our results are tabulated on page 118.

Let me give you our four impressions of the results of this pilot study. First, it appears that the earlier in the disease we start treatment, the better are the results we achieve. Second, considering the amount of time and energy involved, we think LSD is usually not superior to narcotics for pain alleviation. This should not be the primary reason for LSD treatment. The psychological changes produced by LSD are probably responsible for any pain relief noted; however, we feel this can be regarded only as a beneficial secondary effect in some of the cases. Third, we observed a decrease of depression, anxiety and apprehension—especially with regard to the future. Our patients became much less future-oriented, and death did not seem to upset them as much. Such an attitude can give people at the end of their lives a new intensity of feelings and appreciation for the here and now, especially in interaction with their families. Fourth, we had a definite impression of an increase in openness and honesty in interpersonal relationships among family members.

This treatment requires specially trained personnel. Also, it is not simply chemotherapy; LSD is only an aid to psychotherapy. Let me point out an advantage of this treatment. After an LSD experience, usually given weeks or months before death, patients may require less narcotic sedation and can be fully conscious at death.

This brings up some interesting possibilities for parapsychology. One is the unique opportunity to work with people going through the experience of death. Many spontaneous phenomena connected with death are reported in the parapsychological literature, such as Dr. Osis' work.[11] The LSD therapist establishes an intense rapport with the patient so that if the patient should experience anything unusual at the moment of death, he might tell his therapist. Being able to collect data of this kind is the first step toward a more systematic parapsychological investigation of these phenomena.

If patients are willing to cooperate, one might also conduct telepathic

Results of LSD Treatment in Terminal Cancer Patients

Patient		Diagnosis	Disease stage*	Rx. No.	LSD (mcg)	Positive psychedelic content†	Change‡	Pain medic. avg. amt/day §		In-hosp. death, or discharge (dd post LSD)
No.	Age, sex rel. faith							Pre LSD	Post LSD	
D1	42, F. (Jewish)	Breast Ca. Metast.: liver Depression	II	1	200	5	+4.9	—	—	Died 35 dd
D2	65, M. (Jewish)	Lymphoblastic lymphosarcoma Metast.: lung Depression	II	1 2 3 4	200 200 200 300	5 5 5 5	+6 +5.2 +6 +4	3.8 3.0 3.0	0 0 0	Dschg. 5 dd Dschg. 10 dd Dschg. 7 dd Dschg. 8 dd Died 20 dd
D3	56, F. (Prot.)	Uterine cervix Ca. Metast.: abdomen Depression	III	1	200	1	+1.8	0.9	0.1	Died 22 dd
D4	48, F. (Jewish)	Lung adeno-Ca. Metast.: nodes, bone, brain Severe depression	II III	1 2	200 200	4 3	+3.8 +1.2	0.2 3.6	0.2 3.5	Dschg. 5 dd Died 38 dd
D5	43, M. (Prot.)	Bladder Ca. Metast.: L. scapula, spine Depression	III	1	300	2	+1.5	10.8	4.9	Died 17 dd
D6	57, F. (Jewish)	Breast Ca. Metast.: spine, Rt. iliac crest Hemiplegia Osteoporosis Anxiety and depression	II	1 2	300 200	3	+3	5.2	2.1	Dschg. 6 dd

*Explanation of stages (Weisman's classification):[18,19]

Stage I – The initial stage of reduced alternatives
Stage II – The intermediate stage of middle knowledge
Stage III – The terminal stage of counter control and cessation

†0-6 Scale of positive psychedelic content based on amount of:

a. Unity	0 – None
b. Transcendence of time and space	1 – Very slight
c. Positive mood	2 – Slight
d. Sense of sacredness	3 – Somewhat
e. Noetic quality	4 – Moderate
f. Ineffability	5 – Marked
	6 – Very marked

‡Average of global ratings made by attending physicians, nurses, family, and LSD therapist:

Scale of change is from −6 to +6:

−6	Very marked negative change
−5	Marked
−4	Moderate
−3	Somewhat
−2	Slight
−1	Very slight
0	No change
+1	Very slight
+2	Slight
+3	Somewhat
+4	Moderate
+5	Marked
+6	Very marked positive change

§Amount of narcotics used is based on the following narcotic scale of equivalent mg. dosages:

Numorphan . . . 1	Each dosage is assigned an equivalent value of one point.
Dilaudid 2	
Demerol 50	
Codeine 30	
Morphine 8	
Methadone . . . 5	
Pantopon 10	

or "psychometric" experiments with patients who have received LSD. After such an experience, right up to the time of death, many possible alterations from normal waking consciousness are available for study.

TART: Do patients volunteer any suggestions as to why the LSD treatment gives them comfort and a later sense of peace and sustainment?

PAHNKE: No, but I do not think their reasons would differ from those of others who had a psychedelic peak experience. There is a definite decrease of depression and an afterglow effect. Another reason is that the terminal patients seem to lose most of their fear and anxiety, especially fear of the future. Because a lot of pain is due to anxiety, more peace of mind will probably make them more comfortable.

OWEN: But the patients themselves do not rationalize this; it is merely observable as a change of mood. How does this differ from the attitude of devoutly religious patients, Catholics, for example, who get a good deal of direct assurance?

PAHNKE: Our series is too small to make such comparisons, but we hope to work with members of the clergy to do follow-up studies. So far the clergy have been most cooperative.

OWEN: Do you mean in another world?

PAHNKE: No, all our work is done in this world! If we explained to the clergy who are comforting dying people what we are trying to achieve with psychedelic therapy, they could help us in our follow-up work.

LESHAN: I have worked very extensively with dying cancer patients, and I would like to make a few comments. First of all, I think Dr. Pahnke's report is very significant. Anybody who has worked with terminal cancer patients can easily see the humanitarian value of this technique. I have sometimes been able to obtain similar results after 200 to 300 hours of intensive individual psychotherapy. Obviously, psychedelic therapy is a far more practical approach. It would even be more effective if patients were honestly told their condition. I would agree very much with you: these studies have very serious implications for parapsychology. Do you know whether there have been experiences in which the therapist took LSD with the patient at the same time?

PAHNKE: No, none that I know of with cancer patients. I would appreciate other comments and suggestions.

LUDWIG: I would like to suggest that the intensive preparation you give to the patients may not be necessary. A control situation should be set up, comparing your technique with a simple administration of the drug.

PAHNKE: When Kast[12] gave very little preparation, if any, about 30 percent of the patients refused a second treatment, because they had had a frightening or unpleasant experience.

LESHAN: According to my experience with these patients, if you slanted the preparation to the mystical side you would probably produce better results than by simply giving the drug.

TART: It may be that the physician is not the best person to give the preparation. This is an ethical question that I do not feel competent to handle; however, the clergyman might be a far more appropriate person.

MUNDLE: Isn't anyone else shocked that so-called civilized societies provide the opportunity for such experiments? I feel so appalled that I cannot even discuss these experiments rationally. I criticize our societies, not the people who try to do their best to alleviate the last days of dying patients.

LESHAN: These patients were not kept alive so that we could do experiments with them.

MUNDLE: I know. I am not suggesting that. I blame it on our laws, which give us the opportunity for these experiments.

OSMOND: Our society does not permit euthanasia for the very good reason that there is no consensus on this point. Many medical advances have been made because euthanasia is not allowed. I much more deplore the old treatment of dying.

FINER: Cecily Saunders in London has a special hospital for patients beyond all kinds of curative treatment.[13,14] She has wards of six to eight patients. She uses a kind of existential psychotherapy, and she gives them a mixture of gin and heroin timed in such a way that she is able to break the conditioning aspect of the pain. These patients want to die together. They have reached a feeling of community. I think this is very important. They are not afraid anymore; they have gone beyond that. Do your patients die alone?

PAHNKE: In our pilot study we treated six patients over a period of

a year, and did not have the opportunity to have them together. Some of them go home after the LSD treatments.

FINER: But in the last instance, they come back to the hospital, of course.

PAHNKE: Not always. Some prefer to die at home. If Saunders tried LSD in her hospital, she might get the same effects, because our LSD technique is aimed at more than just creating a pain-free experience.

FINER: I think it might be interesting to investigate possible psi occurrences in her setting.

PAHNKE: I would like to comment on what Professor Mundle said. I also feel that it is unfortunate that people are kept alive just as vegetables, are made to go on suffering because medical science has advanced. But even if the laws were changed so that a person could choose when he wanted to die, I still think the LSD treatment might have a place. Being able to review his whole life in perspective, in addition to having a positive and profound emotional experience, might be valuable to the patient.

TART: In parapsychology, there has always been a traditional interest in survival after death and spontaneous events during life, but there is one large gap—the period of death itself. This has been taboo in the Western world. The possibility of substantially reducing narcotic sedation would enable us to study people's reactions right up to the time of death.

PAHNKE: Another factor is that the therapist becomes very attached to the patient. This could be helpful for research. The therapist might want to be there at the time of death and be able to witness possible psi occurrences.

MUNDLE: May I ask a question about psychedelics? According to Dr. Pahnke, psychedelic simply means "mind-manifesting," but I think he probably wanted us to take this in the light of his six positive points of psychedelic content. According to this criterion, I am now in a mild state of psychedelic intoxication; the wine I had at lunch, the tranquilizer I had after lunch, and the coffee I had at tea time have produced in me—to some degree—four of the six marks: a feeling of unity with all these dear people, to whom I'm getting attached; a mild sense of utopian euphoria, which is probably due to the tranquilizer; a feeling of awe and wonder at some of the things that have been said; and a feeling of ineffability. I wouldn't say, however, that I have any feeling of transcending space or

time, or any feeling of having an intuitive knowledge of how everything works. I'm putting this in a slightly frivolous way, but it is a serious question: Are we clear as to what we are talking about when we use this term "psychedelic"? Is it to be used only to refer to LSD and mescaline, or to all drugs which affect the mind, and produce in some degree one or more of the six conditions enumerated by Dr. Pahnke? I compared notes with a person who had experienced the effects of LSD, and they turned out to be terribly like an experience I had when I first drank eight pints of beer as a student.

PAHNKE: Psychedelic, in my definition, does mean "mind-manifesting," but it includes a whole range of different experiences, as I have already explained.[15,16] My six-point definition applies to only *one kind* of psychedelic experience: psychedelic mystical experience. If you restrict the definition in this way your state would not be a very complete psychedelic mystical experience, because it is also a matter of intensity. There is a continuum, though, from zero to six on my scale: you would probably be scoring only about 10 percent.

Answering your second question, I don't think that alcohol is a psychedelic drug. No one under the effects of alcohol scored very high on my questionnaire of psychedelic mystical experience.

MUNDLE: Do you define "psychedelic experience" in such a way that all six factors you enumerate must be present in a fairly high degree?

PAHNKE: Yes, in a psychedelic *mystical* experience all six characteristics have to be present at a certain level, from 60 percent up to maximum, and that gives you the degree of completeness of the experience. I have a questionnaire to help quantitate the ratings.

MUNDLE: This is a satisfactory operational definition. Thank you very much.

LUDWIG: Dr. Pahnke is interested in the mystical state that can be produced by LSD, but does not consider that the same characteristics can be found in other altered states of consciousness.

TART: May I add that the variability in this wide range of states, even if they were all drug-induced, could be brought about psychologically, by guiding the subject toward one or the other state.

LEVINE: Drugs cannot reveal anything that is not already built into

the organism. Many of these states, or probably all of them, can be induced in other ways if the organism is capable of experiencing them.

Besides, we have here the man who coined the term "psychedelic." It would be wise to ask him what he meant by it at the time, and whether he has changed his mind since then. Should these experiences be called psychedelic, or would some other term, based on their pharmacological or psychological impact, be more appropriate?

OSMOND: The intention was to produce a neutral word, more useful than those in use at that time, which were: hallucinogen (and quite often hallucinations do not take place); psychotomimetic (but often psychosis is not clearly mimicked); deliriant (which these substances usually are not, if one means by that confusion-producing, though confusion may occur, of course). They are obviously not anesthetics, which was another possibility. "Phantastica" was a very fine term, but it often put people off; why I don't know.

What eventually happened was that Aldous Huxley and I had a competition, and since I had arranged it, I would be the judge. Aldous was the other competitor. He came up with "phanerothyme," a wonderful Huxley word, but I didn't see how to pronounce it. He liked the word, and made up this little slogan: "To make this mundane world sublime, take half a gram of phanerothyme." I agreed the word was beautiful, but on the other hand I couldn't imagine anyone spelling it, so I took a little dictionary on the derivation of medical terms, and first of all found the term "psyche" for mind. This I knew. Then I started looking for words that might give an idea of the processes I thought might occur. I found "psychelytic," which is a good word. But these substances do not always dissolve the psyche, so I looked further. I then found "psycherexic," a beautiful term, but it mixes you up with diarrhea. I then thought of "psychehormic," but it sounded too strange. Finally I got "psychedelic," which comes from "psyche," mind and "delo," to manifest. I thought it was reasonably neutral. Aldous took a rather dim view of the word, but I think it is respectable. It doesn't suggest psychosis-mimicking, hallucinations, or delirium, and covers, it seems to me, a large number of phenomena that at that time didn't have any useful label. This is how the word came about. Since then, it developed such a commercial utility that I feel very sad that I didn't think of patenting it.

MUNDLE: You were looking for a word to describe the effects of what substance in particular? Mescaline?

OSMOND: Originally mescaline and LSD phenomena, and those provoked by the few other psychoactive substances available at that time. In 1956 there were I think, only six such substances; mescaline, LSD, harmine (with a good deal of uncertainty), hashish derivatives (not yet isolated as pure chemicals), adrenochrome, and adrenolutine. The range of psychoactive substances has increased considerably since then,[17] and the word itself is enthusiastically applied to all human activities, including haute couture. I don't think the word was meant for this.

KRIPPNER: May I add the last chapter to Dr. Osmond's story: apparently he is too modest to do it. When the competition came to an end, his verse in response to Huxley's verse went like this: "To sink to hell, or soar angelic, you must try a psychedelic."

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