

The Psychedelic Mystical Experience in the Human Encounter With Death

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Introduction

THIS Spring I received a long distance telephone call from Dean Samuel Miller, who invited me to give this year's Ingersoll Lecture on human immortality. Three days later, Dean Miller was dead. When I heard the sad news, I, as many of you no doubt, began to think about the way he had influenced me, especially during my theological training here at Harvard Divinity School. One of my most vivid memories was a point which he emphasized in his class on Religion and Literature. Sam Miller felt strongly that in our modern 20th century two of the most profound and important experiences of human life are becoming more and more insulated from everyday existence. These two experiences, birth and death, have the potential for affecting the character and quality of the rest of life. But in each instance, they are falling victim to modern technological efficiency and adding to the process of dehumanization rather than counteracting it.

How many mothers these days are awake and actively participating when giving birth to their babies? And much more rare, how many fathers even are given the opportunity to be present with their wives at the moment of birth? Certainly there are times when medical emergencies make the presence of the father an encumbrance and anesthesia to the point of unconsciousness a necessity for the mother. But from my own experience delivering babies as a general practitioner in a wilderness community in Alaska, most of the time an alert, participating mother and father make human birth much more than just another medical procedure to be mechanically processed. I have also been in the role of the father at the birth of my own three children. Although I am a physician, it was nevertheless difficult to find a hospital which would allow me to be present in the delivery room. But I am tremendously glad that I was. Delivering someone else's baby cannot compare to witnessing the birth of your own. This event made a profound impact on me in regard to reverence for life.

If we turn now to the other end of human life, my experience has taught me that a creative emotional impact is possible in the events surrounding death in spite of the tragedy and sadness. Unfortunately, we have become so "civilized" that death, too, can be robbed of its function in revitalizing and energizing the rest of life for those still alive.

What usually happens in our culture when someone is terminally ill? First of all, the fact of death, although uppermost in everyone's mind, is usually avoided. Talk in general is diversionary, for example, about getting well or about superficial news in an attempt to prevent any serious discussion of more profound issues. As the dying patient's condition worsens, he may be subjected to a barrage of heroic treatment measures which many times can prolong physical life, but also make meaningful interpersonal contact difficult or impossible. The patient is rarely given

a chance to express his feelings about how or where he would like to die, e.g., at home or in the hospital. How could he, when the whole issue of death is somehow avoided? Then, as the moment of death approaches and the patient is put on the danger list, family members can stay with him outside of usual visiting hours, but many times this is subtly discouraged because it can interfere with hospital routine. Sometimes frantic last minute efforts to "revive" the patient are carried out behind drawn white curtains with the family excluded. When death finally and inevitably comes, whether at home or in the hospital, the body is quickly removed by the undertaker, who then proceeds to make the corpse look "as lifelike" as possible. Our costly and elaborate funeral procedures seem intent on disguising the fact of death and somehow insulating the survivors from its impact.

In contrast, consider what happened in other days before our society became so removed from these primary experiences of birth and death. Most babies were born and most people died in their own homes. In the case of death, this meant the preparation of the body for burial—the tasks of bathing, dressing, and grooming—was done by members of the family. This psychological experience was inescapable and profound. Although I believe that a return to more participation in the process of birth is important and can be done in the desirable safety of a hospital setting, I am not suggesting that the elimination of morticians is either desirable or necessary. But perhaps more attention to the events preceding and surrounding the moment of death would add dignity and meaning to this potentially powerful experience.

The Situation of the Terminal Cancer Patient

I do not know how many of you here today have had a primary exposure to someone whom you knew well and intimately who was dying of cancer, but at best this is a grim situation. What do we usually find happening? In my work with such patients I have become keenly aware of the fear, depression, anxiety, loneliness, and suffering which are usually present.

There is a certain degree of underlying fear on the part of everyone involved—not only the patient himself, but also his family and friends, the nurses, and even the doctors. This fear manifests itself in many ways, both consciously and unconsciously, and is basically a fear of the unknown. No matter how much we have been told about death, its implications for life, or what might follow afterwards, down deep we all know that some day each one of us must face this experience as an individual at the end of his own life. This is a very personal thing, and one that can stir deep emotions in any person who is involved even as an observer. Thus, it is not surprising that frequently in this situation the fear is expressed by an avoidance of the issue in many ways, some subtle and some not so subtle. There is hesitation to tell the dying person the gravity of the condition, especially if his diagnosis is cancer. Doctors many times advise the distraught family not to tell. The implication is that the patient psychologically could not take such ominous news and would disintegrate under the stress. A common rationalization is that hope would be taken away and the patient plunged into a deep depression. The assumption is made for the patient that if he knew the truth, a bad situation would automatically be made worse. By this line of reasoning, any show of powerful emotions, even though genuine, is to be avoided at all costs because the patient cannot take it. But what the family really means is that they themselves are afraid to face the fact of death. Undoubtedly, such a course of

action, though admittedly dishonest, seems justified by the situation "for the patient's own good" and is many times the easiest thing to do at first. The patient's direct questions, if any, are parried with cheerful reassurance or adroitly avoided by changing the subject or avowing ignorance. Nurses can do the same or, if cornered, can refer the patient to his doctor, who can fill the time spent with the patient during medical rounds with questions about details of bowel function, appetite, and pain control.

But what does the patient think and feel about these happenings? At first he may believe everything he is told, especially because it is what he would like to think, but as his condition worsens into a progressively downhill course, he may realize more and more that something more serious is occurring. In spite of the natural defense of denial, which can sustain some patients for a while, he will begin to wonder if he is being told the truth. If the pretense is continued, and sometimes at this point it is even intensified, the patient will be getting a powerful nonverbal message to avoid the issue. The fears of the family will also be communicated and will reinforce the patient's own private anxiety. Picking up the emotional turmoil of the family in spite of attempts to hide it, the patient wonders what they really know, but out of concern for them chooses not to bring up issues which they are obviously avoiding. Each side then attempts the heroic posture of protecting the other from what is imagined to be too difficult to bear.

The more this dishonesty is perpetuated, the more difficult it is to face the issues, and the more desperate the situation becomes. Family members wonder what the patient will think of them if he finally finds out that such vital information has been withheld. It is almost as if the participants really believed that not talking about something unpleasant would make it magically disappear.

Perhaps the most devastating effect of such deception, even when done with the honest intention of trying to make the patient's burden lighter, is to increase the patient's psychological isolation. At the very time when the welfare and support of those closest to him could help him the most he feels cut off at a basic level because his trust is undermined. He cannot even talk about the things which concern him deeply. In actuality the emotional pressure is increased for both patient and family at this deadly game of pretense is played out.

It is no wonder that under such circumstances most patients become depressed. With cancer patients the usual downhill course also involves an increase in pain and suffering. When this is treated with increasing doses of narcotic pain-killing drugs, there is increased clouding of consciousness. Aldous Huxley in his last novel, *Island*, describes the all too common situation for the dying cancer patient as increasing pain, increasing anxiety, increasing morphine, increasing addiction, increasing demandingness, with the ultimate disintegration of personality and loss of the opportunity to die with dignity. (1) To this list I would add psychological isolation, withdrawal, and depression.

The LSD research in which I have engaged for the last few years has been an attempt to alter this dehumanization in the course of events prior to death. How, you may ask, can the use of LSD, a powerful and sometimes dangerous psychoactive drug, be of any value to a person who may soon be dead? Don't these poor patients have enough drugs already—anti-cancer medicines, pain-killing narcotics, tranquilizers, and anti-depressants, to mention only a few?

Review of Some Basic Facts About LSD and Psychedelic Experiences

In order to discuss these questions in perspective, the psychological phenomena which can occur when LSD is administered to human beings needs to be kept in mind. Five kinds of potential psychedelic experiences have been described in detail with examples elsewhere. [\(2,3\)](#) Let me briefly review these.

First is the *psychotic psychedelic experience* characterized by the intense negative experience of fear to the point of panic, paranoid delusions of suspicion or grandeur, total confusion, impairment of abstract reasoning, remorse, depression, isolation, and/or somatic discomfort; all of these can be of very powerful magnitude.

Second is the *psychodynamic psychedelic experience* characterized by a dramatic emergence into consciousness of material that has previously been unconscious or preconscious. Abreaction and catharsis are elements of what subjectively is experienced as an actual reliving of incidents from the past or a symbolic portrayal of important conflicts.

Third is the *cognitive psychedelic experience*, characterized by astonishing lucid thought. Problems can be seen from a novel perspective, and the inner relationships of many levels or dimensions can be seen all at once. The creative experience may have something in common with this kind of psychedelic experience, but such a possibility must await the results of future investigation.

Fourth is the *aesthetic psychedelic experience*, characterized by a change and intensification of all sensory modalities. Fascinating changes in sensations and perception can occur: synesthesia in which sounds can be "seen," objects such as flowers or stones that appear to pulsate and become "alive," ordinary things that seem imbued with great beauty, music that takes on an incredible emotional power, and visions of beautiful colors, intricate geometric patterns, architectural forms, landscapes, and almost anything imaginable.

The fifth and last type of psychedelic experience may ultimately prove to be the most valuable and is the focus in regard to treatment of the dying patient. This experience has been called by various names: *psychedelic-peak*; *cosmic*, *transcendental*, or *mystical*. Nine universal psychological characteristics were derived from a study of the literature of spontaneous mystical experience reported throughout world history from almost all cultures and religions. When subjected to a scientific experiment, these characteristics proved to be identical for spontaneous and psychedelic mystical experiences. [\(4,5\)](#)

1. *Unity* is a sense of cosmic oneness achieved through positive ego transcendence. Although the usual sense of identity, or ego, fades away, consciousness and memory are not lost; instead, the person becomes very much aware of being part of a dimension much vaster and greater than himself. In addition to the route of the "inner world" where external sense impressions are left behind, unity can also be experienced through the external world, so that a person reports that he feels a part of everything that is (for example, objects, other people, or the universe), or more simply, that "all is One."

2. *Transcendence of Time and Space* means that the subject feels beyond past, present, and future, and beyond ordinary three-dimension space in a realm of eternity or infinity.

3. *Deeply Felt Positive Mood* contains the elements of joy, blessedness, peace and love to an overwhelming degree of intensity, often accompanied by tears.

4. *Sense of Sacredness* is a nonrational, intuitive, hushed, palpitant response of awe and wonder in the presence of inspiring Reality. The main elements are awe, humility, and reverence, but the terms of traditional theology or religion need not necessarily be used in the description.

5. *The Noetic Quality*, as named by William James, (6) is a feeling of insight or illumination that, on an intuitive, nonrational level and with a tremendous force of certainty, subjectively has the status of Ultimate Reality. This knowledge is not an increase of facts but is a gain in psychological, philosophical, or theological insight.

6. *Paradoxicality* refers to the logical contradictions that become apparent if descriptions are strictly analyzed. A person may realize that he is experiencing, for example, an "identity of opposites," yet it seems to make sense at the time, and also afterwards.

7. *Alleged ineffability* means that the experience is felt to be beyond words, non-verbal, and impossible to describe; yet most persons who insist on the ineffability do in fact make elaborate attempts to communicate the experience.

8. *Transiency* means that the psychedelic peak does not last in its full intensity, but instead passes into an afterglow and remains only as a memory.

9. *Persisting Positive Changes in Attitudes and Behavior* are toward self, others, life, and the experience itself.

All the research I have done with psychedelic drugs for the past six years supports the hypothesis that the kind of experience is strongly dependent upon the necessary drug dosage, but only as a trigger or facilitating agent, and upon the crucial extra-drug variables of set and setting. Psychological set refers to factors within the subject, such as personality, life history, expectation, preparation, mood prior to the session, and, perhaps most important of all the ability to trust, to let go, and to be open to whatever comes. The setting refers to factors outside the individual, such as the physical environment in which the drug is taken, the psychological and emotional atmosphere to which the subject is exposed, how he is treated by those around him, and what the experimenter expects the drug reaction will be.

Elements of all these kinds of psychedelic experiences may appear in any one psychedelic session, but the psychedelic mystical experience is the most rare, being achieved by only 25 to 50 per cent of subjects, even under the most optimal conditions of set and setting. The more control that is gained over these variables, the more predictable is the chance of obtaining the psychedelic mystical experience, but it is by no means automatic. Yet when such an event is experienced and then adequately integrated, it can provide the fulcrum for transformations of attitude and behavior.

The Procedure of Psychedelic Psychotherapy in our Current Research with the Dying Patient

At the Sinai Hospital in Baltimore, Maryland, we have been assessing the impact of psychedelic psychotherapy utilizing LSD, in the management of terminal cancer patients. (7) An LSD session is imbedded within the matrix of brief intensive psychotherapy. Every effort is made to maximize the possibility for the psychedelic mystical experience to occur.

After a patient is referred for the special treatment, he is screened both by psychiatric interviews and by psychological tests. Then an informed consent is obtained in writing from both the patient and his closest relative. By informed consent, I mean that the nature and aim of the research are explained, including the possible risks and benefits. Because of the sensationalism in the mass media about the dangers of LSD, most patients do not suffer from lack of information about risks. In fact, their exaggerated ideas make a positive preparation more difficult, and some patients who might benefit greatly refuse to participate in the research because of fear. Most patients are surprised to learn that the safety record of LSD when given by trained personnel under medically controlled conditions is comparable to that of other commonly used psychiatric procedures. (8)

Patients are told that LSD will not cure their physical illness, but may give them more emotional strength to cope with what lies ahead. Usually control of pain is one of the presenting problems. Although most of our patients have some degree of physical pain, we try to emphasize that the analgesic effect of LSD cannot be guaranteed and is not the main reason for the treatment.

After consent is obtained, preparation for the LSD session begins in the form of intensive individual psychotherapy for 8 to 10 hours. The aim is to get to know the person in as much depth as possible by reviewing his life story and his important past and current interpersonal relationships. Into this discussion inevitably come his philosophy of life, religious experiences, and hopes for the future. No attempt is made to force a discussion of diagnosis or prognosis: but any indication of a desire to explore these areas is sensitively dealt with in a way appropriate to each individual. Above all the development of deep rapport and trust is essential before LSD can be safely given.

Family members, too, are drawn into the therapy both individually and in groups, with and without the patient. Some of the issues discussed are positive and negative feelings, the quality of interpersonal relationships, communication with the patient, fear of death, and concern about the future. Their questions and fears about LSD also must be aired.

Finally, after days of preparations when the patient is deemed ready, LSD is administered in a private hospital room, decorated with flowers and objects which have meaning for the patient. The therapist who has worked with the patient and a trained psychiatric nurse are in constant attendance throughout the 10-to 12-hour session. For most of the day, the patient listens to classical music through stereophonic high fidelity earphones. The purpose of the music is to help him let go of his usual ego controls and experience the unusual emotional awareness which is possible under these conditions of altered brain physiology.

In the evening, when the LSD effects have waned, the closest family members

visit the patient. These times can be an opportunity for a gratifying emotional interchange. In the days after the session, the patient is helped to integrate new experiences, feelings, and insights.

Results of our Research

With this procedure thus far, we have treated only 17 patients in a pilot study with no control group. (9) While not much weight can be given to our tentative findings in any scientific sense some results can be mentioned to stimulate our thinking in regard to our subject here today—man's approach to death and what may lie beyond.

Bearing in mind the inconclusiveness of our impressions, what have we seen following the combined procedure of LSD plus associated psychotherapy when measured against the situation encountered at the beginning of treatment? First, no patients seemed to have been harmed, even those who were physically quite ill. In general, about one-third of the patients were not particularly helped, one-third were helped somewhat, and one-third were helped dramatically.

Let us look at the direction of the change, especially in those patients who were helped the most. The LSD session seemed to provide the focus around which a new situation could evolve in the milieu provided by the psychotherapy. The most dramatic effects came in the wake of psychedelic mystical experience. There was a decrease in fear, anxiety, worry, and depression. Sometimes the need for pain medications was lessened, but mainly because the patient was able to tolerate what pain he had more easily. There was an increase in serenity, peace, and calmness. Most striking was a decrease in the fear of death. It seem as if the mystical experience, by opening the patient to usually untapped ranges of human consciousness, can provide a sense of security that transcends even death. Once the patient is able to release all the psychic energy which he has tied to the fear of death and worry about the future, he seems able to live more meaningfully in the present. He can turn his attention to the things which have the most significance in the here and now. This change of attitude has an effect on all the people around him. The depth and intensity of interpersonal closeness can be increased so that honesty and courage emerge in a joint confrontation and acceptance of the total situation.

Let me illustrate some of the things I have seen by describing an actual case. A 49-year-old woman with inoperable cancer of the pancreas was brought to the hospital by her husband and daughter when they could no longer tolerate her increasing agony because of the intractable pain that was not satisfactorily controlled by narcotic drugs. At this point, she was more like a whimpering animal than a human being. In my work with the family it soon became apparent that they were not only at the end of their rope in regard to physical management of the patient but were becoming increasingly concerned lest the patient discover the true nature of her "tumor" and become even more depressed than she already was. After I had gained his confidence, the husband one day asked me directly if I did not think that "mercy killing" was the most humane solution in such cases.

After the usual period of screening and preparation, the patient was given an LSD session that was filled with religious symbolism and during which the patient reviewed many events of her life. During part of the day the patient strongly felt

the presence of God and, through this experience, a sense of release from guilt feelings about certain of her past actions. Although the patient did not have a complete psychedelic mystical experience, she carried a definite degree of psychedelic afterglow into the evening fleeting with her family. Her mood was brighter, and they noticed increased relaxation and peace of mind. Her pain although still present, was controlled with narcotic drugs and did not have the same disabling quality as before admission to the hospital.

A few days after her LSD session, as I was sitting by her bedside, the patient asked me directly, "Doctor, I have been wondering what really is the matter with me. Do I have cancer?" In this particular case the patient's personal physician had advised me that neither he nor the family had felt it wise to discuss the diagnosis. I asked the patient if she had discussed the matter with her doctor. "I have tried to," she said, "but everyone avoids my questions. I think I do have cancer, because if I didn't they would say so directly." I then proceeded to explore with the patient the meaning of such a diagnosis for her if it were, indeed true. Discussing the question posed in this half-hypothetical manner, the patient indicated that if she did have cancer, she would have to learn to live with it and accept it as a fact of her life. At that very moment we heard the voice of the patient's physician in the hallway. The patient asked me to get him. After I had advised him of the nature of the preceding discussion, we entered the room together. Without too much hesitation, the patient posed for him the same question she had asked me, "Is this tumor that I have a cancer?" He answered, "Well, it's cancerous." "But is it a cancer?" she insistently asked. When he indicated that it was, she gave a sigh and said: "Well, it's a relief to know what I really have, even though it isn't good news." Then she asked with some concern: "Do my family know and have they known all along?" He nodded, and she sank back on the bed half in amusement and half in disgust, saying, "And they wouldn't even tell me."

In talking with the husband and daughter that afternoon, I informed them what had happened. The news upset them even when they learned that the patient had taken it calmly. They felt unmasked and wondered how they could face the patient. They could not quite believe that she could have accepted it so well and felt that there would be an emotional "scene." After discussing their feeling about the issue, I suggested that we go and see the patient together. As we neared the room, the daughter became visibly upset and at the doorway refused to go in. After more discussion she reluctantly agreed, and we entered the room together.

As soon as the patient saw her husband, she smiled and said: "Well, I guess you know now that I'm going to die." With this the husband broke down and began to sob uncontrollably. The patient stretched out her arms inviting him to come to her bedside. *She* took him in her arms and consoled *him*, explaining that we all have to die sometime, that she was grateful for what life had given her, and that she was sure they would all get through this together. A sense of relief and intense interpersonal closeness pervaded the room.

Before the patient left the hospital she had a second LSD session. This time one of the major concerns that she explored was the way she would explain to her young grandchildren what was happening to her and what the ultimate outcome would be. This was an issue which the daughter had also discussed with me. She wondered whether she should even let the children see their grandmother, who was becoming progressively emaciated. During the LSD session the patient had a vision of all her grandchildren standing by her beside. She had a very intense experience of positive emotional feelings of love which she had for these children

and yet was able to come to a resolution of what she could share with them in the days ahead.

After discharge from the hospital, the patient's husband and daughter were able to care for her satisfactorily at home during the month before she died. Her pain was now adequately controlled with the aid of narcotics, but the daughter remarked on how much better her mother seemed to be able to bear the pain than previously. The patient was able to see her grandchildren for some time each day, and they understood what was happening as she got progressively weaker. They took this opportunity to discuss with her some of their own questions about death, and particularly her own death.

Discussion

At this point let us turn our attention to the question of why the psychedelic mystical experience seems to help these patients. I suggest that this experience has the potential for opening up the channels of positive feeling which may have been previously closed or clogged. Our experiments have indicated that deep within every human being there are vast usually untapped resources of love, joy, and peace. One aspect of the psychedelic mystical experience is a release of these positive feelings with subsequent decrease in negative feelings of depression, despair, and anxiety. But this shift in mood is not enough to account for our most dramatic finding—loss of the fear of death. In fact, the experience of deeply felt positive mood may be more the result than the cause of this change in attitude toward death. Our data show that these feelings are released most fully when there is complete surrender to the ego-loss experience of positive ego transcendence, which is often experienced as a moment of death and rebirth. At this point, unless the patient previously had experienced mystical consciousness spontaneously, he becomes intensely aware of completely new dimensions of experience which he might never before have imagined possible. From his own personal experience, he now knows that there is more to the potential range of human consciousness than we ordinarily realize. This profound and awe-inspiring insight sometimes is experienced as if a veil had been lifted and can transform attitude and behavior. Once a person has had this vision, life and death can be looked at from a new perspective. Patients seem able to meet the unknown with a new sense of self-confidence and security. Logical arguments that human experience must be limited to the narrow range of ordinary human consciousness never can have the same force again. One patient, after his LSD experience, wondered how he could have been so worried about death, which now seemed to be just another step in the life process. Others frankly and calmly stated that they would be "ready to go" when the time to die came. This degree of acceptance and willingness to face the unknown ahead was in strong contrast to the atmosphere of fear among the family and patient before psychedelic psychotherapy was started.

Before discussing the relevance of the psychedelic mystical experience to immortality it would be well to review what William James said in his Ingersoll Lecture 70 years ago. (10) In his view the brain is a filter of consciousness which transmits part of the Vaster Consciousness of Reality, like a partially opaque glass allowing through a few rays of a super solar blaze. The "degree of opacity" or threshold of brain activity can vary so that under certain conditions "more light" or an awareness of a wider and more intense range of consciousness is possible. According to this hypothesis, the physical brain is necessary only as a means to

transmit a part of this Larger Consciousness into the dimension of ordinary reality perceived by individual normal waking consciousness. If an individual brain is damaged, disintegrates, or dies, this Larger Consciousness does not cease.

The interesting thing is that our LSD patients who have had the psychedelic mystical experience and who previously knew nothing of this transmission theory are supplying data which precisely fit this hypothesis. Their threshold seems to be lowered so that they directly experience this Vaster Consciousness in an Eternal Now, beyond time and space. Again and again we are told that this experience subjectively occurs "out of the body."

But what is the relationship of individual self-consciousness of the abiding presence of this Vaster Consciousness? William James did not settle this question nor can I, but again the psychedelic mystical experience may provide some clues. During the mystical experience when the experiencer has lost individuality and become a part of a Reality Greater-than-self, paradoxically, something of the self remains to record the experience in memory. One of the greatest fears about human death is that personal individual existence and memory will be gone forever. Yet having passed through psychological ego death in the mystical experience, a person still preserves enough self-consciousness so that at least part of individual memory is not lost. In comparison, the loss of other attributes of individuality such as bodily sensations and personal ego accomplishments do not appear too important. It is at least suggestive that persons experiencing mystical consciousness do not feel that they have "lost" anything crucial—in fact, a common report is that they have "come home" and regained proper perspective.

By now I hope it is clear that LSD used in conjunction with psychedelic psychotherapy is not another chemo-therapeutic method to achieve a euphoric death, such as increasing doses of painkillers which have a dulling effect on consciousness. With such narcotics an escape is provided from harsh and painful reality, but such cherished human experiences as love and interpersonal closeness are not particularly enhanced. If the fear surrounding death is dealt with at all, it is by sedating the patient so much that he may be unaware of what is really happening.

In contrast, when LSD is judiciously used, the mind becomes more active and alert. Problems concerning death can be dealt with rather than escaped from. Positive emotions can be released in the service of deepened interpersonal relationships. An important distinction is that LSD is not used on a continuing basis. The purpose is not to keep the patient continuously under the effect of LSD. One treatment is sometimes enough to make a lasting difference. Even repeated treatments are spaced to allow time for meaningful integration of the experience. Our data thus far have indicated that the earlier LSD is given in the course of the disease, the better chance there is for the patient to utilize any insights gained. Although the treatment may prepare a patient for death, the quality of living in the days before death can be also affected.

Let me illustrate: one of our patients with metastatic breast cancer had a son in his early twenties. His first bitter reaction when the possibility of LSD treatment was mentioned was, "What do you want to do, make my mother die with a smile on her face?" Much to his surprise, the most important effect of the treatment was to establish their somewhat ruptured relationship on a new creative level. Now, five months after her only treatment, this patient is still working on the implications of this positive change in her family situation.

Does this treatment threaten to manipulate the human mind in an unethical and dehumanizing manner? If by manipulation we mean that human beings are used for purposes to which they neither consent nor understand, the answer is no. Just the opposite is true. The goal is to help the patient become more fully human and able to use the last days of his life in a meaningful way—in fact, a way which highlights the very things most basic and important: human love, sharing, closeness, and thoughtful reflection about the meaning and events of human life. As one of our patients put it: "You get a clear picture of what is important and what isn't. All the rushing around and the worry about keeping my house neat was so unimportant compared to the expression of feelings toward my family. I now fully realize that the core of life is love."

In an ethical consideration of any new experimental procedure, the proportionate degree of risk compared to the potential benefit must be considered. From what we have seen in our research so far, the benefits in human terms have been impressive, the risks minimal. The danger of LSD depends on how it is used. As Dr. Albert Kurland, who is responsible for all the LSD projects at the Maryland Psychiatric Research Center, has indicated, the role of LSD in therapy is like that of a scalpel in surgical intervention: the scalpel is helpful, but without the skilled surgeon it is merely a dangerous instrument. (11)

One consequence of the mystical experience is the inevitable attempt to make intellectual sense of it. The primary psychological experience must be interpreted. While some persons use such symbols as a More, a Beyond, or the Ground of Being, other speak of the presence of God as the most adequate reflection of what was encountered. The fact that this experience was triggered or facilitated with a drug may cause some to feel uneasy. The troublesome implication seems to be that God can thus be controlled, limited, or manipulated. Yet the psychedelic mystical experience is by no means automatic, and there are many unexplained factors. All chemical substances, including LSD, are part of God's creation. Man, of course, has the freedom to misuse or abuse them, but the use of LSD to give comfort to the dying patient hardly seems an abuse. For man to decide that God cannot work through any part of his creation would be to limit the freedom and omnipotence of God. (12)

That such profound experiences are possible with the aid of a drug may seem on first impression to be an easy and somewhat sacrilegious means of "instant salvation." On the contrary, much intensive preparation is needed for the psychedelic mystical experience to occur at all. Then, perhaps even more importantly, the work of follow-up integration is necessary for the experience to be therapeutically useful rather than only a pleasant memory. Yet, subjectively, there is also a profound feeling of gratitude because such an experience seems undeserved. The concept of gratuitous grace as another example of God's freedom is appropriate here.

The mystical experience itself by emphasizing an immediate perception of the Divine dimension has historically met opposition from the church. Mysticism has also always been accused of pantheism. Yet the indwelling of the Spirit is as deeply rooted in Christian tradition as the absolute transcendence of God.

Implications

What implications would there be if further research substantiates the promise that psychedelic psychotherapy has shown in the treatment of the dying patient? In my own work I have welcomed the collaboration of religious professionals, part of whose job is ministering to the dying. In our modern age this task has become increasingly difficult because of the growing dissatisfaction with traditional formulations and beliefs. The psychedelic mystical experience has the potential for opening up new ways of thinking and feeling. Patients are eager to discuss the meaning of these new insights, many of which are imbedded in religious symbolism. Ministers, priests, and rabbis, if they have some understanding of the use of psychedelic drugs, can be of tremendous help in integrating these experiences.

In the future it might be possible to establish centers where dying patients could be sent to have a psychedelic experience in the most optimal setting. The staff of such a place would include psychiatrists, psychologists, and religious professionals. This suggestion is not as utopian as it might sound. Dr. Cecily Saunders in England has already pioneered a successful center where medical treatment is given to keep dying patients as comfortable as possible in their last days. (13) LSD has not been tried there, but adequate doses of alcohol and heroin are used to combat depression and pain. Our preliminary results suggest that psychedelic drugs might accomplish much more. Certainly this hypothesis can be tested experimentally.

If the use of psychedelic psychotherapy for the dying patient ever should become widespread in our society, there would probably be a change in our whole approach toward death. There might be less fear and more acceptance of this part of the life process. Certainly more honesty and less pretense would be a healthy change for our culture.

Conclusion

Although the question of human immortality may always remain a tantalizing enigma, the psychedelic mystical experience at least teaches that there is more to the range of human consciousness than we might ordinarily assume. Because the answer cannot be definitely proved either way, there is certainly no cause for pessimistic despair. Perhaps it is not so unfortunate that each person must ultimately find out for himself. The psychedelic mystical experience can prepare one to face that moment with a sense of open adventure.

Footnotes

1 Aldous HUXLEY, *Island* (New York: Harper & Row 1962).

2 WALTER N. PAHNKE, and WILLIAM A. RICHARDS Implications of LSD and Experimental Mysticism, *Journal of Religion and Health* 5 (1966), 175-208.

3 WALTER N. PAHNKE, LSD and Religious Experience In *LSD, Man and Society*. Leaf and Debold (ed.) (Middletown, Connecticut: Wesleyan University Press, 1967)

4 WALTER N. PAHNKE, *Drugs and Mysticism: An Analysis of the Relationship between Psychedelic Drugs and the Mystical Consciousness*. Unpublished Ph.D. thesis Cambridge, Massachusetts: Harvard University, 1963.

5 For a summary of this experiment, see WALTER N PAHNKE, The Contribution of the Psychology of Religion to the Therapeutic Use of the Psychedelic Substances, in *The Use of LSD in Psychotherapy and Alcoholism*, H. A ABRAMSON (ed.) (Indianapolis: Bobbs-Merrill, 1967) 629-52.

6 WILLIAM JAMES, *The Varieties of Religious Experience* (Modern Library Edition) (New York: Random House, 1902), 371f.

7 A. KURLAND, W. PAHNKE, S. UNGER, and C. SAVAGE Psychedelic Therapy (Utilizing LSD) with Terminal Cancer Patients, *Journal of Psychopharmacology* Vol. II (in press, 1968).

8 In the several large-scale research projects which have been approved by the U.S. Government in the last few years, permanent adverse effects have been quite rare. At the Spring Grove State Hospital, for example, over 300 patients have been treated with LSD without a single case of long-term psychological or physical harm directly attributable to the treatment, although there have been two transient post-LSD disturbances which have subsequently responded well to conventional treatment.

9 The fact that there was no control group against which to measure these results immediately raises the possibility that our findings were due to powerful suggestion implemented by the intensive psychotherapy rather than anything to do with the administration of LSD. It might be argued that a placebo control group would attain the same results, but other experimental evidence concerning the occurrence of psychedelic mystical experience tends to cast some doubt on this argument. In two previous series of psychedelic drug experiments that I have helped to plan and supervise, double blind control groups *were* utilized. In each instance the psychedelic mystical experience occurred to a statistically significant degree in those persons who received a high dose of psilocybin when compared to control groups which had exactly the same preparation, expectation, and suggestion, but received only a placebo or control substance with active physiological effects. (W. N. PAHNKE, thesis, *op. cit.*; and W. N. PAHNKE, LSD and Religious Experience, *op. cit.*)

Consideration of the powerful placebo effect is certainly important. Recent research has demonstrated that giving LSD mainly as a chemotherapy without adequate preparation and suggestion does not provide any advantage over psychotherapy alone in the treatment of alcoholism. (A LUDWIG, J. LEVINE, and L. STARK, A Clinical Evaluation of LSD Treatment in Alcoholism, Paper presented to the American Psychiatric Association meeting in Boston, Massachusetts, May 15, 1968.)

This finding underlines the importance of utilizing suggestion to the maximum in combination with LSD as has been our practice. For example, at the Spring Grove State Hospital in Baltimore, the double blind control study of psychedelic peak therapy utilizing LSD has demonstrated that one out of four alcoholics who received 450 micrograms of LSD had a profound mystical experience compared to one out of ten who received only 50 micrograms (total N = 122). Both groups

received exactly the same amount of pre-LSD psychotherapy and identical preparation for the LSD session. In this particular study the results in terms of clinical outcome are not yet completely evaluated, but early trends in the data show that those patients who had a profound psychedelic peak experience achieved greater clinical improvement. (A. KURLAND, S. UNGER, C. SAVAGE, J. OLSSON, W. PAHNKE, *Psychedelic Therapy Utilizing LSD in the Treatment of the Alcoholic Patient: A Progress Report* presented to the American Psychiatric Association meeting in Boston, Massachusetts, May 15, 1968.)

Thus, in the research with cancer patients there is reason to suppose that the beneficial results observed are not due to either the psycho-pharmacological effects of LSD or the placebo effect (suggestion and preparation) *alone*, but rather a combination of set, setting, and drug. For the best results it seems essential that the placebo effect be utilized to the utmost in conjunction with the psychedelic drug which is then seen to be a necessary, but not sufficient, condition.

10 WILLIAM JAMES, *Human Immortality: Two Supposed Objections to the Doctrine*, The Ingersoll Lecture on Human Immortality, 1898, in *William James on Psychological Research*, GARDNER MURPHY and ROBERT BALLOU (eds.) (New York: The Viking Press, 1960), 279-308.

11 ALBERT A. KURLAND, with CHARLES SAVAGE, JOHN W. SHAFFER, and SANFORD UNGER, *The Therapeutic Potential of LSD in Medicine*, in *LSD, Man and Society*, LEAF and DEBOLD (ed.) (Middletown, Connecticut: Wesleyan University Press, 1968), 34.

12 Those who have lived fully and deeply know that suffering can have a redemptive value in terms of personal growth and understanding. Yet in my medical experience the slow and tortuous devastation to the human spirit caused by the usual course of terminal cancer is mostly on the negative side. Reflecting my bias as a physician dedicated to the alleviation of suffering, I do not feel that this kind of emotional and physical torment serves much useful purpose. For this reason, I feel that the addition of psychedelic drugs to the medical armamentarium against human suffering cannot be objected to on the grounds that man has no right to interfere with an element of human life which may serve a useful purpose in God's plan for man's development. Such an argument is too similar to the theological objections raised against the introduction of smallpox vaccination or the invention of rapid transportation.

13 CECILY SAUNDERS, *The Treatment of Intractable Pain in Terminal Cancer*, *Proceedings of the Royal Society of Medicine*, Vol. 56, No. 3 (March, 1963), 191-97.