THE JOURNAL OF NERVOUS AND MENTAL DISEASE
Vol. 145, No. 1

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PSYCHOLOGICAL DETERMINANTS OF "LSD REACTIONS"

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A small percentage of persons have experienced, following the ingestion of lysergic acid diethylamide (LSD), what is now known by users as a "bad trip" and by psychiatrists as "complications" (3, 5), "adverse reactions" (4), or "untoward reactions" (8). These reactions include prolonged psychoses, severe anxiety and panic states, homicidal and suicidal acts, antisocial behavior, recurrence of LSD-induced symptoms without further intake, and gradual decline in ambition and social functioning.

Many users who have undergone such reactions seemed to be using LSD with therapeutic intent. Frosch *et al.* state, "LSD has become increasingly popular among many who are hoping to increase their self-awareness in a 'rational' and rapid fashion without undergoing the stress, work and expense associated with psychotherapy" (8, p. 1238). A therapeutic motive for LSD use was also noted by Farnsworth (6).

To our knowledge no one has studied how widespread this desire for conflict resolution by LSD ingestion is among users who eventually need psychiatric attention, what the conflicts are, in what ways the users expect LSD to help them, and what part, if any, the desire itself has in the so-called "LSD reactions."

METHOD

Our paper is an attempt to answer these questions by presenting data from a study of 25 LSD users seen consecutively in the psychiatric emergency area of Kings County Hospital, Brooklyn, New York, between August 15, 1965, and June 15, 1966. Of these 25, 23 were admitted, and of these 23, we were able to study only 15 carefully.[3] Ten reported symptoms which commenced within several hours of their ingestion of LSD; the other five experienced symptoms not temporally related to LSD use.

RESULTS

The social and psychiatric backgrounds of these patients are presented elsewhere (2) and agree in most respects with similar data previously published on hospitalized users (1, 7, 10). All the patients were between 18 and 30 years old, and 88 per cent had had experience with at least one other psychedelic, habituating or addicting drug—most often marijuana.

Half of the patients gave therapeutic motives for taking LSD as, for example, "to understand myself better," "to help me do better in school," "to help me decide whether I should remarry my ex-wife." The other half denied therapeutic intent, stating they took it because of "curiosity," "to open my mind to the energies of the universe," and "to enjoy intercourse more."

All 15 patients began LSD ingestion at a time of life crisis with which they felt themselves inadequate to deal. These crises involved a test of the patients' ability to function sexually, socially, or professionally. Either greater pressure was placed on the patient to assume a more demanding and responsible adult role or a previously existing prop to the patient's self-image as a mature and adequate adult was lost. (See Table 1.) These crises included a proposal

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[3] The others were discharged before they could be seen more than once.

TABLE 1
Life Crises of Hospitalized LSD Users

Life Crisis	*N* of Patients*
Losses	
Sexual partner	5 (33%)
Job	3 (20%)
Father	1 (7%)
Self-esteem	1 (7%)
Increased responsibilities	
Increased opportunities for heterosexual intercourse	2 (13%)
Impending marriage	1 (7%)
Proposal of marriage	1 (7%)
Out of wedlock pregnancy	1 (7%)

* Total *N* = 15.

of marriage, an impending marriage, a girl friend's pregnancy, returning to college after flunking out, a change of work shift increasing a patient's opportunity for sexual intercourse with his wife, being put out of the house because the patient couldn't hold a job, the loss of a girl friend because of the patient's jealousy. In other words, these represent the same types of precipitating stresses which often lead to psychiatric hospitalization in patients who have never used LSD.

LSD ingestion was thought to be related to the life crisis because:

1) The first ingestion occurred shortly after the crisis.

For example: A 23-year-old woman first took LSD the day she received a proposal of marriage from the man with whom she had lived for the preceding three years. She was hospitalized six weeks later with an acute paranoid psychosis. A 27-year-old man started taking LSD within a week of his ejection from his father's house and took it 30 times in the subsequent year. He was then hospitalized because of a suicide attempt.

2) The patient's productions and behavior during the "LSD reaction" were an attempt to either overcome or explain his inability to meet the crisis or to change his life situation to a less threatening one.

For example: A 20-year-old man, with a three-month history of LSD use, was hospitalized six weeks before his wedding date, preoccupied with his inability to pay for his wedding and his belief that he was God. After his girl friend left him, a 26-year-old man, while under the influence of LSD, attacked the person he held responsible. A 24-year-old man who would no longer have to work nights and, therefore, would have more frequent opportunities for intercourse with his wife, while under the influence of LSD, stated he was God, took off his clothes and made a sexual advance to a five-year-old boy.

Three patients used LSD exclusively prior to intercourse. Two others, not included in the well studied group, were homosexuals who reported they could have heterosexual intercourse only when under the drug's influence.

3) The current life crisis seemed related to long-standing difficulties in sexual and social adjustment. These difficulties long antedated LSD use. (See Table 2.)

All 15 patients used other drugs. Six had been arrested. Of the ten who were working or who were seeking employment, five were unable to keep a job; two worked for close relatives. Six had dropped out of or had been dropped from school. Three were overt homosexuals; two were fearful of homosexual impulses; one was afraid he

TABLE 2
Symptoms of Hospitalized LSD Users Prior to LSD Ingestion

Symptom	*N* of Patients*
Use of other drugs	15 (100%)
Sexual maladjustment	7 (47%)
Overt homosexuality	3 (20%)
Fear of homosexual impulses	2 (13%)
Fear of inability to satisfy partner	1 (7%)
Fear of sex changing	1 (7%)
Law offenses	6 (40%)
Dropped from school	6 (40%)
Inability to keep a job	5 (33%)†

* Total *N* = 15.
† 50 per cent of those in the labor market.

would be unable to satisfy his girl friend sexually and one was concerned he was turning into a woman. Eight had had psychiatric treatment, four as outpatients, four as inpatients.

If the ingestion is related to the crisis, the question which arises is how the patient expects LSD to help him resolve the crisis. Why does he choose LSD? The pharmacological effects are by no means unique. It is the mystique surrounding LSD which is unique. The lay press and the professional literature have endowed it with an aura both of great power and great danger.

The therapeutic mystique has been fostered by descriptions of LSD in popular literature as a "vitamin for the mind" and an "expander of consciousness" and, recently, as the "sacrament" of a new religious group, the League for Spiritual Discovery. Patients desperately unhappy with themselves because they are unable to maintain the long-term trusting relationships necessary to obtain help through psychotherapy hope to overcome their inner feelings of inadequacy by introjecting the fantasied potency of LSD. This unconscious fantasy of acquiring tremendous powers from LSD often appears in the content of the LSD psychosis when the ego's ability to repress is destroyed. Sometimes, this fantasy becomes one of rebirth as a "savior." Under the influence of LSD three of our patients said they were God. Many stated they felt the drug gave them extraordinary powers. Preoccupied since adolescence with the size of his penis, a 22-year-old man stated, "When I take LSD I feel like a psychologist. I can look into other people's eyes and tell what they're thinking. I only get that feeling under LSD."

LSD has been held to be a causative as well as a curative agent in psychiatric illness. Paradoxically, publicity concerning adverse reactions to LSD seems to increase its attractiveness to some individuals. Half our patients were hospitalized in the two months following two widely publicized incidents which occurred in the same month. In one of these a five-year-old girl was hospitalized after accidentally ingesting LSD, and in the other, a man was reported to have committed murder while under the drug's influence. It may well be that patients, who consciously or unconsciously realize they are decompensating, ingest the drug with the hope that it will help them prevent decompensation. However, if such decompensation does occur, they believe they can hold LSD responsible, an attitude similar to the alcoholics who attribute the responsibility for their antisocial behavior to the alcohol.

DISCUSSION

Why some users are hospitalized and others are not would seem to depend on four factors: 1) a pre-existing serious inadequacy in meeting adult sexual and social demands, 2) an orientation toward drugs as a method of relieving tensions, 3) a current life crisis which the patient feels unable to master, and 4) a conviction, conscious or unconscious, that LSD can resolve the crisis.

Users who do not later come to psychiatric attention for "LSD reactions" may not have the same fantasy motivating their ingestion. Just as the pleasure effect of narcotics is dependent not only on their pharmacological properties but on "psychological factors, a certain active preparedness with which the individual approaches the pleasure effect" (9), the "bad trip" effect of LSD may well also depend partly on the "active preparedness" of the patient. Such "active preparedness" might be the conviction that only through LSD ingestion can the person function adequately in a new and more demanding situation. When the belief is not sustained by reality, the mental decompensation which has been threatening the patient and which he took LSD to avoid becomes manifest with resulting "adverse" or "untoward reactions."

These "reactions" can be better understood as representing a combination of a functional psychotic decompensation colored to varying degrees by: 1) the patient's disappointment in the failure of LSD to avert the decompensation, 2) his wish to attribute his symptoms to the drug, and 3) the pharmacological effects of the drug. The present nomenclature, by de-emphasizing the importance of the pre-drug personality, the current life situation and the fantasy which led to the drug use, also de-emphasizes the facts that repeated ingestions occur even *after* serious "reactions" and that decompensation often occurs *without* repeated ingestion. When examining a patient with an LSD reaction, a psychiatrist should explore these areas and, in addition, try to decide what alternatives are available to the patient in dealing with the current life crisis. By neglecting these factors psychiatrists at times give overly optimistic prognoses of such "reactions."

For example, newspaper accounts of the man accused of committing a murder while under the influence of LSD mentioned that three weeks before he had been released from a mental hospital to which he had been admitted because of assaultive behavior also while under LSD's influence. In another case, a 22-year-old serviceman was brought to a psychiatric hospital by his friends because, when they had taken LSD together, he had tried to jump out of a window. He told the examining psychiatrist that he had left his base without permission because he was depressed about his inability to stop taking drugs. He said he had joined the service to get away from drugs but had then returned to New York when he found they were as readily available at his base as in New York. He was not admitted to the hospital and committed suicide eight days later by taking an overdose of barbiturates. It is not known whether he was under the influence of LSD when he ingested the barbiturates.

SUMMARY

LSD users who are later hospitalized for untoward reactions are characterized by 1) pre-existing difficulties in adult social and sexual functioning, 2) a tendency to use drugs to reduce tensions, 3) a current life crisis in which greater demands are placed on their ability to function as adults, and 4) a fantasy, conscious or unconscious, that LSD ingestion will enable them to overcome this crisis by introjecting strength. When this fantasy conflicts with reality, the patient may project upon LSD the cause of his decompensation. If this projection is accepted by the examining psychiatrist, he ignores the factors other than LSD which could have produced the decompensation. It is our belief that the psychoses, suicides and homicides which have been reported as "LSD reactions" would have occurred *without* LSD ingestion, and, in fact, might even have been temporarily controlled by the fantasy of "cure" through LSD. Focus in examination of the user should be on his pre-LSD personality, current life situation, and motives, conscious or unconscious, for taking the drug. We maintain that LSD users who need psychiatric hospitalization—whether they express therapeutic, philosophic, artistic, or casual motivations for LSD intake —are attempting to use the drug to overcome a current life crisis.

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