

Flashbacks: A Personal Follow-up

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SUMMARY. During the period 1971-1973, it was found that 53 out of 91 young drug abusers in a psychiatric hospital had experienced flashbacks. This applied to as many as 50 out of the 65 patients who had used LSD, but also to abusers of organic solvents and cannabis. As many as 38% of the patients were found to be severely incapacitated by their flashbacks.

On a personal follow-up 1 1/2-4 years after the first therapeutic contact, 35 patients were still troubled by flashbacks. On the whole the reactions were less intense than at the time of the first contact. No relation between the flashbacks and protracted psychotic development could be established.

The overall clinical and social course was worse for patients with flashbacks than for the rest of the population.

Patients still bothered by flashbacks used drugs and alcohol as sedatives to a greater extent than the rest.

KEY WORDS: Flashbacks - Young Drug Abusers - Psychopathology - Artificial Psychoses - Follow-up.

LITERATURE

Acute mental side effects (bad trips) following ingestion of hallucinogenic compounds include all forms of drug reactions experienced as adverse or unpleasant by the users. In their extreme form they appear as frightening hallucinations, often so strong that the users are unable to control them. [5, 11, 12, 20, 21]. The delayed reactions (flashbacks) may be as frightening. Coming spontaneously, they may appear from weeks to months after the last drug ingestion. In their less extreme manifestations they are felt to be a recurrence of previous drug experiences in the form of altered moods and distorted sensory impressions. As these experiences are not always unpleasant, they can by some be produced on purpose [10].

In their more extreme manifestations flashbacks are felt as a repetition of previous bad trips with hallucinations and overwhelming anxiety. Flashbacks are reported to have provoked reactions clinically undistinguishable from acute paranoid states and schizophreniform psychoses [5, 7, 8, 9, 12, 15, 20].

No connection has been found between frequency of drug ingestion and development of side effects. Reportedly, cannabis, alcohol, psychedelic film and music, and a wide variety of frightening and provoking situations may trigger flashbacks [10, 12, 13, 23].

For the most part flashbacks have been reported following use of LSD. Smart & Bateman [21] found no more than 11 cases reported in the world literature up to 1967, all secondary to LSD. With the recent spread of hallucinogenic compounds new reports have appeared. In 1967 Robbins et al. [19] found that 32% of 34 patients hospitalized because of LSD problems had experienced flashbacks. The same year Horowitz [13] reported that about 5% of an ordinary American hippie population represented flashbacks, while as many as 28% of the LSD users had such reactions. In 1971 McGlothlin & Arnold [16] demonstrated 13% mild flashbacks among 247 persons given LSD for therapeutic purposes, and Hasse & Waldman [10] found that as many as 54% of 87 drug abusers chosen at random had experienced flashbacks.

Horowitz [13] and Bloomquist [3] postulate that any hallucinogenic compound may trigger flashbacks. It is known that not only LSD, cannabis, and related hallucinogenics, but also antihistamines, ephedrine, central stimulants, and opiates may cause hallucinations during use [8, 18, 23]. Can they also give rise to flashbacks? Both Annis & Smart [2] and Holsten [11] have reported flashbacks among young people using no other drugs apart from cannabis.

McWilliams & Tuttle [17] maintain that a review of the literature up to 1973 does not establish that use of hallucinogenic compounds by itself can cause lasting psychologic complications.

Reports of acute and protracted side effects due to clinical and experimental use of hallucinogenics have been a rarity [5, 6, 15, 16, 17]. Illegal drug abuse among young persons seems to represent a danger of quite another order [1, 11, 14]. According to the studies of Copra et al. [4] and Glass & Bowers [7] misuse of hallucinogenic compounds can provoke long-lasting psychologic complications in especially vulnerable persons.

PURPOSE OF THE STUDY

As yet, little is known as to what consequences the present use of hallucinogenics may have in the long run. No further investigation of patients who have experienced flashbacks has been reported. The present work is designed to investigate the frequency and degree of seriousness of flashbacks in drug abusers who have applied to a psychiatric hospital for help.

I wanted to investigate whether these reactions occur only in users of cannabis and LSD or whether they are also experienced by users of other drugs. Through follow-up examination of the patients I hoped to determine how long they were troubled by flashbacks, and whether the latter might give rise to lasting psychologic complications. Above all, I was interested in elucidating whether flashbacks might be said to affect patients' future clinical and social development.

METHODS

The present material is collected from young abusers consecutively admitted to and treated in Neevengarden Hospital. Neevengarden is a psychiatric hospital serving a population of about 300,000 persons living in the city of Bergen and county Sogn and Fjordane, Norway.

The patients were treated in the hospitals various milieu-therapeutic wards. Organization of admission, individual and group therapy,

and aftercare were done by a special team comprising a doctor, a social worker, and a clinical psychologist.

All patients who asked for help from 1971 through 1973 were interviewed both before and after treatment. The patients are grouped according to the year of the first therapeutic contact, as the treatment in many cases has required considerable time. Analysis of the hallucinogenic experiences and aftereffects was made on the basis of a personal interview by the author.

The questions were repeated on several occasions, and the answers varied little. To the best of my ability I tried to avoid leading questions. Most of the patients spontaneously recounted their experiences. During the interviews I consistently avoided the terms "flashback" and "bad trip".

As criteria of flashbacks the following standards were used:

1. Flashbacks must occur after a hallucinogenic drug experience, and never prior to one.
2. Flashbacks should occur after a clearly defined drug-free interval of at least 72 h.
3. Flashbacks should include characteristics which, subjectively are related to or resemble those undergone during the drug experience itself.

Flashbacks have been subdivided according to degree of seriousness and subjective discomfort:

Type I: Characterized by subjectively increased awareness and often distortion of sensory impulses. Sun rays become haloes, straight lines undulate, etc. Such experiences are not wholly uncomfortable, occur suddenly, and last from seconds to minutes. Some people can produce them at will.

Type II: Characterized by illusions and bits of previous drug experiences. Colors and sounds take on an unusual intensity. The surrounding atmosphere appears changed. The patient is often startled by the slightest sound. Elements of previous drug experiences recur accompanied by anxiety. Flashbacks last from seconds to minutes and are usually sudden.

Type III: Characterized by hallucinations and reexperience of drug effects. Both internal and external sensory impulses are distorted and amplified. Flashbacks can last from minutes to hours and are not accompanied by other cognitive disturbances.

Type IV: Violent hallucinations accompanied by marked mood swings. Definite psychotic reactions of depressive, paranoid, or schizophreniform type are seen.

On follow-up all patients were seen personally, mostly at home. The interviews lasted from 1 1/2 to 3 h, and some were repeated. Information about drug use, housing, and occupation was checked against information from the family, police, hospital statistics, and teachers or employers. This was always done with the patient's consent.

Patients who on follow-up reported flashbacks during the last 3 months were recorded as with flashbacks. Those who had not used narcotic drugs including cannabis for the last 3 months or longer were recorded as drugfree. Those who admitted to using alcohol more than 3 times per week were classified as alcohol users. All who on follow-up had a permanent address and occupation for at least 3 months were classed as socially functioning.

MATERIAL

During the period 1971-1973, a total of 91 young drug abusers applied for help. Mean age for the 18 patients who came for treatment in 1971 was 19 years, for the 12 added in 1972, 20 years. Most were residents of Bergen. With few exceptions they stemmed from the lower social classes judging from the parents' social status. In 43% of the families one or both of the parents had been absent for at least 1 year prior to the patient's 15th year. Only 42 patients could be said to have a permanent and satisfactory living quarter at the first contact.

All patients were in serious conflict with their families. A total of 33 patients (36%) had dropped out of school before terminating the 9th form, and 70 patients (77%) had no occupation. Five of the females (17%), against 46 of the males (74%) had previous convictions. More than half of the convictions were for larceny, while the other half applied to illegal possession and disposal of narcotics. In Table 1 the patients are classified according to their most preferred drugs. Common to all is their use of other drugs when unable to procure their preference. Few used alcohol or sedatives. To most the experience aspect represented the main attraction.

Use of amphetamine tablets together with LSD to quicken the effect became more frequent in 1973. Sixty-five patients (71%) had used LSD one or more times. Several were of the opinion that their bad trips and flashbacks were caused by strychnine admixture in the LSD they had used. It was on no occasion possible to procure samples of the drug for analysis. Mean duration of the abuse at first contact was 2 1/2 years. In general the use of drugs had taken place in dubious circumstances and without specific rules or knowledge of the drugs.

Table 1. Each patient categorized according to the most used drug at the time of the first admission and follow-up. Where no clear preference could be found, the patients are put under mixed abuse

Most frequently used drug	First admission	Follow-up
Hash/LSD	30	7
Hash	11	10
Mixed abuse	32	3
Solvents	5	-
Opiates	10	3
Aphetamines	-	3
Antihistamines	3	-
Alcohol	-	13
Total	91	39

At the first contact a total of 53 patients (58%) had flashbacks. The frequency of flashbacks did not differ markedly in the patient groups from 1971, 1972, or 1973. Two patients described flashbacks of type II following use of cannabis only. One patient had experienced vivid hallucinations when abusing organic solvents and had flashbacks for about 6 months after he stopped sniffing this substance. He had not previously used LSD and had never hallucinated in connection with cannabis.

As many as 50 of the 65 patients who had used LSD reported flashbacks. Three had experienced this only as a prolongation of the LSD trip itself, lasting up to 3 weeks. The rest had flashbacks of varying intensity following an interval ranging from 3 days up to 2 years after the last hallucinogenic drug experience.

Two patients with a heavy abuse of antihistamines had both experienced hallucinations during intake of this drug and had similar experiences following a drug-free interval. However, both had also been massive LSD users.

One patient had violent hallucinations and a psychotic experience lasting for 3 weeks in connection with ingestion of STP (DOM). He was troubled for a long time with type IV flashbacks. His history also included heavy use of LSD.

Occurrence of flashbacks related to age and sex revealed no definite pattern. Neither did there seem to be any connection between flashbacks and duration of abuse.

The study shows that flashbacks are not related to frequency of LSD use. Nor do the patients with the most serious flashbacks seem to have used LSD more than the rest of the population. Some got flashbacks after only one ingestion of LSD, while others reported at least 500-1000 LSD trips before they experienced flashbacks.

A brief inquiry into family conditions, psychiatric problems during childhood and adolescence, problems in school, and criminality shows no difference between patients with and patients without flashbacks. Seventeen patients had been troubled by flashbacks for a protracted period without daring to confide in others. It was obviously not accepted among drug abusers to talk about unpleasant drug experiences. This tended to make the others more suggestible and receptive to anxiety. Moreover, to talk about previous unpleasant drug experiences might for many be felt as the best way of provoking new ones.

Table 2. Average number of years of drug abuse prior to first admission among all patients compared to patients with flashbacks

Years of drug abuse	< 1	1-2	2-3	> 3
Patients with flashbacks	6	10	7	30
All patients	13	18	15	45

The triggering of flashbacks was heterogeneous. Most patients got their flashbacks while listening to psychedelic music, going to cinema, or watching TV. Invariably, flashbacks were experienced just before falling asleep or during intercourse. Also moderate doses of alcohol or cannabis reportedly gave flashbacks. It seems as if flashbacks are most easily triggered in situations where the person's ego defences are weakened.

Between flashbacks many patients developed rigorous defense mechanisms. Especially those with flashbacks of type IV revealed imperative thought-systems or rituals. In the period they seemed to be completely incapable of doing anything else beside trying to avoid new flashbacks.

Treatment of Bad Trips and Flashbacks

Calm and secure surroundings appear to be of prime importance for treating patients with acute confusion and psychosis after use of LSD and cannabis. In such states the patients are highly suggestible and receptive. Many quietened down when the situation was explained to them in a calm and sensible way. When medication was needed chlorprothixen or diazepam had a good effect. The drowsiness brought about by chlorpromazine often made the patients afraid and agitated, and they tried to fight it. Acute flashbacks were treated correspondingly.

In further treatment, emphasis was placed on ego-supporting psychotherapy and group therapy. The therapy was continued over a long time with outpatient appointments.

The Follow-up

Of a total of 91 patients, 3 (3.3%) had died during the observation period. One died of a cerebral infarction in a drug-free interval, one perished in a car accident, and the other one committed suicide. This is a death rate far above what is expected for the age-group. Eighty-seven (99%) of the remaining 88 were interviewed. The last patient, a foreigner who at the first contact presented flashbacks of type IV, was not seen in person. The data collected suggest that this patient had perhaps developed schizophrenia.

Average period of observation counted from the first contact was, for the patients from 1971, 3 years and 3 months, from 1972, 2 years and 2 months, and from 1973, 1 year and 5 months.

Twenty-nine (55%) of the 53 patients who had flashbacks at the first contact were still troubled by them at the time of the follow-up. In the observation period another 6 patients had experienced flashbacks. Thus, on follow-up, 35 of the 87 patients were found to have flashbacks. None presented type IV, and, on the whole, the intensity of the flashbacks had diminished.

The majority now regarded LSD as a dangerous drug, and it was seldom used. Twenty-six patients (30%) were at this time regularly using drugs. In addition, 13 were classified as having alcohol problems, and another 6 might be said to have a combined drug/alcohol problem.

Also on follow-up many could relate that there were still times when they strained every nerve in their body to think about past bad trips and flashbacks. By doing so, they imagined that they might "understand", hence solve their flashbacks, and get rid of them. Such ruminations had a paralyzing effect, and prevented many from doing something with their life here and now.

Table 3. Number of patients with flashbacks of types I-IV at the time of the first admission and at the follow-up

	No flashback		Flashb. type I		Flashb. type II		Flashb. type III		Flashb. type IV		
	n	%	n	%	n	%	n	%	n	%	
First admission	38	42	2	2	16	18	25	27	10	11	91 = 100%
Follow-up	52	60	7	8	20	23	8	9	-	-	87 = 100%

According to one patient: "Between these attacks I walk around with an intense feeling that something happened to me when I was on LSD, something I have forgotten. If only I could remember what it was I think these things would disappear".

Another patient who was haunted by the same notion had taken LSD again. This time he had a good trip. He alleged that his flashbacks rapidly faded and disappeared after this.

Most of the patients with flashbacks of type III were likewise highly preoccupied with their reactions in between flashbacks. They frequently developed imperative rituals and ideas in the hope of avoiding new flashbacks.

Only one patient, not personally interviewed presented signs of thought disturbances or psychotic symptoms on follow-up. Thus, in the present material, no connection between flashbacks and subsequent protracted psychotic development can be established.

On the average, patients with the most serious flashbacks at the time of the first contact also were most troubled by flashbacks at the time of the follow-up.

Of the 35 patients who at the first contact presented flashbacks of types II and IV, 20 (57%) could be characterized as drug-free at follow-up and 17 (49%) as without alcohol problems either. The group with flashbacks I and II at the first contact proved to have managed somewhat better. The best outcome was found for those who at the first contact had not experienced flashbacks. Thirty of these (79%) could be said to be drug-free, and 23 had no alcohol problems either. Of the patients who at first contact did not present flashbacks 42% could be classified as socially functioning and drug-free, against 35% of the patients who had flashbacks at the first contact.

Of the 35 patients who still had flashbacks on follow-up, 20 (60%) were regarded as drug-free, and 15 (43%) were also without alcohol problems. Seven (2 %) of the patients with flashbacks were classified as drug-free and socially functioning on follow-up, as against 28 (54%) of the 52 without flashbacks.

Seven patients were at the time of the follow-up classified as socially functioning while still using drugs. At weekends one used a combination of amphetamine powder which he snuffed and alcohol. The others used moderate doses of cannabis or alcohol and sedativa. Of the seven, two patients

Table 5. The situation at the time of the follow-up for those patients who at that time were classified as having flashbacks I and II, II and IV, and no flashback. S. F. = socially functioning

	Un-certain		Drug-free		Drug- and alcohol-free		S. F.		S. F. and drug- and alcohol-free	
	n	%	n	%	n	%	n	%	n	%
Flashbacks I and II	-	-	18	67	12	44	9	33	6	22
										27 = 100%
Flashbacks III and IV	-	-	3	38	3	38	3	38	1	13
										8 = 100%
No flashbacks	-	-	41	79	34	65	30	58	28	54
										52 = 100%
Total	1	1	62	70	49	56	42	48	35	39
										88 = 100%

had not experienced flashbacks. The other five claimed to use drugs to calm down and find release from the social stress and the general fear of new flashbacks.

Fourteen (54%) of the 26 patients who were still using drugs had flashbacks on follow-up, as against 21 (34%) of the 62 drug-free patients. All the 23 patients who formerly chiefly used LSD stated that their reason for giving up this drug was dread of flashbacks and bad trips. Some also said that the drug no longer gave them the same intense experiences. Among the patients who were still drug users, the abuse pattern had changed markedly during the observation period. Instead of seeking new and exciting drug experiences, the sedative effect of the drugs now seemingly constituted the main attraction. It should be noted that alcohol was more often used at the time of the follow-up than prior to the first contact (Table 1). Thirteen of the 88 patients were becoming increasingly dependent on alcohol and sedatives. For 6 of these, unpleasant flashbacks represented a contributory factor.

For most of the patients it was a real problem to be accepted in a job or at school. They were extremely insecure and had few personal and social resources to support them. Many hesitated to take up an occupation in fear of new flashbacks. They just drifted along, anxious and self-absorbed. When working regularly their flashbacks tended to fade away.

DISCUSSION

As in previous reports, the present study is built upon an assumption of a connection between the use of hallucinogenics and flashbacks. Qualitatively, flashbacks do resemble the experiences perceived during drug use. All had their flashbacks after use, while none had similar experiences prior to the drug ingestion. This supports the hypothesis without in any way furnishing a proof of it. All patients were interviewed by a person they knew. This may be one reason why so many dared recount their experiences. However, there undoubtedly is a danger that this sort of study may induce patients to feel the phenomena in question.

Flashbacks of types I and II were not, per se, experienced as particularly frightening. They might, however, have serious consequences if they were to occur while driving or during work requiring constant alertness.

That flashbacks occur after use of such different compounds as cannabis, LSD, and organic solvents indicates that it might be the hallucinogenic experience itself which might give rise to subsequent flashbacks.

It seems as if a person under influence of a hallucinogenic drug can be overwhelmed with latent material which he is unable to work through or accept without drugs. An acute reaction, described as a bad trip may ensue, followed by anxiety and withdrawal. Situations in which the ego defenses are weakened can later give rise to new experiences of latent conflicts, but now in the form they were experienced under influence of the drug. Thus an unsolved conflict might later be experienced as a threatening or actual flashback. In some persons the flashbacks seem to have a deconditioning effect on the feeling and perceptions formerly experienced under influence of the drug. Likewise, flashbacks in some persons seem to function as a means of escaping otherwise more frightening and threatening situations. In their milder degrees flashbacks can be understood as new ways of perception formerly learned under influence of the drugs.

These patients are young people striving for an adult adjustment in an extremely difficult situation. Withdrawal from a difficult world into uncontrolled drug abuse makes them exposed to side effects of quite another order than can be explained from drug abuse alone. At the time of the follow-up, patients with flashbacks used drugs to a larger extent and were not managing as well as the others. The immaturity, insecurity, and lowered self-esteem which exposes these patients to subsequent side effects also makes it difficult for them to take up a more orderly life.

It hardly seems appropriate to make comparisons between illegal use of hallucinogenics and controlled clinical and experimental use of the same compounds. The existential situation in which the drugs are used seems to be decisive for the frequency as well as for the seriousness of the side effects.

Illegal use of LSD is about to limit itself, both because of the unpleasant side effects and because the drug effect in itself by and by is losing much of its glamor. The shift of the pattern of use from illegal narcotic agents toward alcohol and sedativa clearly indicates the dubious prognosis of those who are unable to stop using drugs. The parallel to the chronic alcoholic is clearly in view. Although this material does not establish any relation between use of hallucinogenic drugs and protracted psychotic development, the flashbacks may complicate the future life of the users. When treating young people with drug problems one should bear these phenomena in mind. At the same time, one should avoid any form of alarm propaganda and unnecessary focusing on drug abuse and side effects. A proper understanding of hallucinogenic drugs and their actions calls for a thorough study of the socioeconomic and existential situation of the users.

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