LSD USE IN BRITAIN

The second of the *ISDD drug notes* series to be reprinted in *Druglink* covers LSD, the most frequently used hallucinogen in Britain, a drug whose doses are measured in micrograms but whose effects are often described in cosmic terms. We attempt to summarise the facts.

ISDD Information Service

LSD (d-lysergic acid diethylamide) was discovered in 1938 by Albert Hofmann then employed as a chemist at Sandoz Pharmaceuticals in Geneva. The drug was synthesised in the course of a systematic attempt to prepare new therapeutic drugs from ergot, a parasitic fungus found growing naturally on rye and other grasses.

Disappointing preliminary tests on animals meant that further work was shelved until in 1943 "a feeling that it would be worthwhile to carry out more profound studies" led Hofmann to prepare a fresh quantity. During these later tests, Hofmann unwittingly ingested the minute amount necessary to trigger the first LSD 'trip'.

Suspecting LSD as the cause of his bewildering experience, Hofmann began a series of experiments on himself and colleagues. Confirmation was swift; in the sense of the amount of drug needed to produce an effect, Hofmann had stumbled on one of the most potent drugs ever discovered.

● **LSD was made available** by Sandoz and later (in the UK) by SPOFA of Czechoslovakia to supply a growing research and clinical market throughout the fifties and early sixties. Beginning as early as 1950 in America and 1953 in the UK, LSD was used extensively in the psychotherapeutic treatment of alcohol and drug addiction for those with disturbed personalities and with terminally ill patients to alleviate pain and help them cope with facing death. LSD was valued for its ability to deliver what one writer has recently called "a big bang" to the memory of a repressed neurotic releasing a stream of buried recollections and supressed responses.

Medical opinion remained divided on the efficacy (and to a lesser extent) the safety of LSD psychotherapy. A major UK survey conducted by Nicholas Malleson in 1968 used questionnaire returns from clinicians engaged in LSD therapy to construct a bank of information from some 50,000 sessions. Malleson along with other clinicians took the view that LSD's potential benefit was restricted to "substantially strong people whose neurosis is of a kind dimming their enjoyment of life". Other practitioners reported successes with a far wider range of personality disorders up to and including recalcitrant psychosis.

Having studied the results of Malleson's work among others, the Advisory Committee on Drug Dependence (later Advisory Council on the Misuse of Drugs) concluded in a report published in 1970 that LSD had a real if limited therapeutic value and recommended licensing of "approved and responsible practitioners" for a continuation of LSD's clinical and experimental use. However, the Committee were out of step with the prevailing social and legal responses to LSD following on the rapid rise of non-medical use by young people. Placed under the drug laws in 1966 both in Britain and America, therapeutic prescribing of LSD had virtually ceased by 1968.

LSD's 'big bang' capabilities also attracted the US military and intelligence services as a potential brainwashing/truth drug weapon. These tests were eventually abandoned in the sixties, but ironically, in the process some of America's most prestigious universities and hospitals had played host as test centres using volunteer students and graduate assistants. One such hospital was attached to Harvard University. Students and academics began feeding back their experiences which attracted the attention of two Harvard psychologists, Timothy Leary and Richard Alpert.

> "Last Friday, April 16, 1943, I was forced to interrupt my work in the laboratory in the middle of the afternoon and proceed home, being affected by a remarkable restlessness, combined with a slight dizziness. At home I lay down and sank into a not unpleasant intoxicated-like condition, characterised by an extremely stimulated imagination. In a dreamlike state, with eyes closed, I perceived an uninterrupted stream of fantastic pictures, extraordinary shapes with intense ka'eidoscopic play of colours. After some two hours the condition faded away."
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> Albert Hofmann. *LSD; my problem child.* McGraw-Hill, 1980.

The term 'psychedelic' was first coined in 1957 by Dr. Humphrey Osmond, a pioneer LSD researcher. Leary and Alpert conducted their own experiments on the nature and value of the psychedelic experience. They conceived of LSD as a 'chemical key' that would open up the mind to new experiences of self-awareness and enlightenment which (so they believed) if taken by sufficient numbers of people joined together in a "Brotherhood of Love" would benefit mankind as a whole.

Through the endeavours of 'underground' chemists, LSD circulated freely among student groups, intellectuals, artists and musicians around the country where the idea of LSD as a means to self-improvement had caught on. From those groups came most of the subjective data on the drug's ability to sensitise aesthetic appreciation of music, art and other creative pursuits.

Inevitably, use of LSD spread to a wider and predominantly younger age group who were uninterested in "finding themselves" — they simply liked using LSD.

Whatever their ideological bases, the spokesmen and distributors of LSD for non-medical use met with a ferocious public reaction which eventually induced Sandoz to withdraw from the clinical market in 1966-67 in turn helping to shut down further research into LSD's therapeutic applications.

Even those in favour of its continuing and more widespread medical use were violently opposed to any encouragement of LSD's use by untrained personnel in uncontrolled situations, arguing that the incidence of adverse reactions was likely to be greatly increased in these circumstances, and that, in the absence of readily available medical care, these reactions might have serious consequences for the individual's health.

Others claimed that in the light of its possible impact on physical health, any long term use of LSD, medical or otherwise, was foolhardy. Consequences envisaged ranged from brain damage, deformed babies, psychosis, homicide, suicide, to a frequently mistaken belief in one's ability to fly. Some of these dangers were real; others simply without foundation (see below), but publicity over these concerns served to catapult LSD to the status of a first division media 'horror' drug, much as cannabis had been in the thirties and phencyclidine (angel dust; PCP) became in the seventies.

● **During the seventies** interest in LSD diminished considerably as the supporting 'hippy' ideology lost credibility and the 'alternative' communities on both sides of the Atlantic broke up.

Earlier Leary had founded the Brotherhood of Eternal Love, a pseudo-religious organisation fronting a drug-smuggling operation. Linked to it was an LSD factory in Britain which between 1970-1973 turned out six million tablets of LSD.

This last significant attempt to turn on the world collapsed in 1977 at the end of a long police investigation codenamed 'Operation Julie'. Interest in the case has surfaced twice since; once when assets were seized by the court and in 1985 when a dramatic reconstruction of the investigation was screened on British television.

Users: how many and who?

Even when LSD had a much higher profile, little was done to establish the extent and nature of its use. Two national surveys of drug use, conducted by OPCS in 1969, and the BBC Midweek Programme in 1973, both reported 'ever used' figures for LSD at around 650,000 people or one per cent of the population.

In 1982 National Opinion Polls (in a

survey for the *Daily Mail*) interviewed 1326 people aged between 15-21 where a three per cent ever-used figure for LSD was recorded while in 1985, the *News of the World* commissioned Audience Research to conduct a further national survey of a representative sample of those aged between 16-34. In this survey eight per cent said they had been to parties where LSD had been taken while four per cent said they had tried the drug themselves. Extrapolated nationally, this would again reveal an 'ever-used' figure for LSD of around 650,000 people.

● **One possible indicator** of continuing (if not necessarily rising) demand is the identification of new LSD designs appearing on the market in recent years. LSD is most usually distributed as microdots on paper carrying distinct designs. The most frequently encountered designs are currently Toadstool, Red Hearts and ET. Palm Trees, LSD 100 and Pink Panther are new designs on the market. These 'fun' designs are indicative of the way LSD is nowadays regarded as a 'good time' drug.

Two examples demonstrate the broad church of LSD users. The first shows that LSD remains a favoured drug among those attending events previously associated with the 'alternative' society. The Sheffield branch of the 'Legalise Cannabis Campaign' conducted an 'intended use' survey at the Stonehenge and Glastonbury Festivals in 1984. This revealed that 41 per cent and 30 per cent of respective festival-goers would be using LSD. Only cannabis was a more favoured drug.

By contrast, LSD is also prevalent among groups for whom hippy ideology is anathema. The *Sunday Times* magazine (23 October 1985) published an article entitled "All Dressed Up and Nowhere to Go" focussing on Britain's unemployed. One punk remarked "I was taking acid twice a week and it was making me go crazy". The article continued "most punks are just on LSD or Speed which they take at night-clubs because it is so good with the music."

Research from the Drug Indicators Project suggests that use of LSD will continue to expand, but it is unlikely to attract more than a minority interest in relation to other illicit drugs such as cannabis, amphetamines and heroin, although among a limited section of the population its use may continue to be fairly common.

The law

LSD was first subject to special controls in the UK, when in 1966 it was added to the list of drugs covered by the 1964 Drugs (Prevention of Misuse) Act. Currently it is controlled as a Class A drug under the 1971 Misuse of Drugs Act, making its unauthorised possession, supply, manufacture, import, etc, criminal offences attracting the same maximum penalties as those involving heroin among others.

Maximum custodial sentence for possession of a class A drug is seven years: those convicted of the more serious trafficking offences involving these drugs face up to life imprisonment.

Lysergamide (lysergic acid amide) used in the manufacture of LSD, and a constituent of psychoactive varieties of Morning Glory seeds, is also a class A drug.

In 1979 there were 216 seizures of LSD with 208 persons being found guilty or cautioned for LSD-related offences. This represented the lowest point in a downward trend starting in 1971. However, by 1984, the figures had risen to 629 and 558 respectively.

Effects of using LSD

LSD will 'work' in doses as small as 25 micrograms (or 25 millionths of a gram) although the average dose for a full blown psychedelic experience is 100-150 micrograms.

A trip begins about half an hour to one hour after taking LSD, peaks after two to six hours and fades out after about 12 hours, depending on the dose and having progressed through several phases.

Exactly what happens when a drug is taken is often determined by what the user expects will happen and the situation in which the drug is used (eg, alone or with a group of trusted friends etc).

Leary conceived of LSD as a 'chemical key' that would open up the mind to new experiences of self-awareness and enlightenment.

Users often report visual effects such as intensified colours, distorted shapes and sizes, and movement in stationary objects. Distortions of hearing occur, as do changes in sense of time and place. Generally the user knows these effects to be unreal. True hallucinations are relatively rare.

Physical effects are so slight (eg, dilation of pupils, slight rise in body temperature, goosebumps) compared with psychological or emotional effects that they are of little importance.

● **Emotional reactions vary,** but include heightened self-awareness and mystical or ecstatic experiences. Feelings of dissociation from the body are commonly reported.

Unpleasant reactions are more likely if the user is unstable, anxious or depressed, and may include anxiety, depression, dizziness, disorientation, and sometimes a short-lived psychotic episode including hallucinations and paranoia, commonly known as a 'bad trip'.

The same person may have good and bad 'trips' on different occasions, and even within the same trip. But whilst the LSD experience is variable compared with most other drugs, it is also relatively more open to the user's intentions and to the suggestions of others. Hence friendly reassurance is an effective antidote to a bad trip. Experienced users steer the trip toward the area they wish to experience or explore.

It is difficult to combine a trip with a task requiring concentration, and driving will almost certainly be impaired. Suicides or deaths due to LSD-induced beliefs or perceptions, though much publicised, are rare. Fatal overdose was unreported in the literature until as recently as 1985. In the case reported, from the Metropolitan Police Forensic Science Laboratory, twice the amount ever found at post-mortem was detected in the subject's body with no other drug present.

And the consequences?

There are no known physical dangers attributable to long term LSD use. In particular there is no reliable evidence that LSD causes brain damage or damage to future children. Adverse psychological effects are possible after one trip, but are more common in regular users.

● **Prolonged serious adverse** psychological reactions are rare, but have been reported. These can be psychotic in nature and generally occur among those with existing or latent mental illness, most commonly after repeated LSD use, when LSD has perhaps acted as 'the final straw'. No case of LSD producing psychosis of this nature in a previously well balanced individual has been established.

According to DHSS mental hospital admission statistics for the 1979-1984 period, LSD was implicated as the main factor for admission in 61 males and 17 females and a further 21 males and 11 females where LSD use was diagnosed as an underlying or associated factor.

A number of LSD users report a short-lived vivid reliving of a past trip without use of the drug known as a 'flashback'. Part of LSD's media portfolio as a horror drug were claims that users could have flashbacks lasting days or even weeks. In truth an LSD flashback (which can occur up to months after using the drug) normally only lasts a few minutes and is rarely dangerous although it can leave the person feeling anxious, disoriented or distressed. Flashbacks are most likely to happen in situations reminiscent of past LSD experiences or sometimes when a past user is smoking cannabis.

'Fun designs such as Pink Panther are indicative of how LSD is regarded as a 'good time' drug.

There is no physical dependence to LSD, but tolerance to the drug builds up rapidly. After 24 hours to achieve the same effect a much larger dose is necessary. After three to four days of increasing the dosage, a limit is reached whereby no dose would be effective. A break of around three days would be required for LSD 'sensitivity' to return. A small minority of those who have ever used LSD become psychologically dependent.

The effects and consequences of taking hallucinogenic mushrooms are similar to those of LSD. For more information see/read the pamphlet *Hallucinogenic Mushrooms* published by Release and available from ISDD at 80p.

LSD: ISDD drug notes 2 is available from ISDD at £0.50 plus £0.20 p&p.