

HALLUCINOGENS

GENERAL

The most important chemical subgroups in this category are the indoles, the phenylalkylamines with methoxy- and/or methylenedioxy- substituents in the phenyl ring and the tetrahydrocannabinols.

The indoles and the phenyl-substituted phenylalkylamines (hallucinogenic amphetamines) are related pharmacologically, if not chemically. Many of the drugs in these two subgroups are hallucinogens that create dependence of the hallucinogen (LSD) type, which is characterized by moderate psychic dependence, quickly developing tolerance but no physical dependence. Drugs of this type cause central nervous system excitation, alterations in mood ranging from euphoria to dysphoria, anxiety, insomnia, anorexia, difficulty in concentrating, marked alterations in sensory perception, changes in body image and hallucinations. They are usually taken in the hope of inducing a mystical experience leading to a greater understanding of the users' personal problems and of the universe. These drugs appear to be particularly attractive to young people of bohemian habits who have rejected the usual goals and mores of their societies.

The dangers of these drugs include harm to the person himself or other people as a result of the drug-induced psychosis. In addition, the hallucinogens may solidify withdrawal from the mainstream of society and identification with a drug-taking subculture. Moreover, these compounds can precipitate psychotic states which are more severe and which may last longer than normally occurs.

Some persons have remained permanently psychotic after taking hallucinogens. These individuals are generally believed to have been persons who were "predisposed" to psychiatric disease and who were making only marginal personal adjustments in society. Even if this interpretation is correct, it must be admitted that the hallucinogen may have been a

final and very important factor in precipitating permanent mental disorder in predisposed personalities.

The tetrahydrocannabinols include the most active materials found in marijuana [(—)- Δ^9 -THC and (—)- Δ^8 -THC]. These drugs can now be synthesized. Like LSD, they are psychotomimetic^{383, 385, 394} but have sedative rather than stimulating effects, show no crossed tolerance to LSD, and are devoid of the autonomic effects of LSD.

These drugs are likely, if available, to produce dependence of the *Cannabis* (marijuana) type which is characterized by moderate to strong psychic dependence, little tolerance (?), and absence of physical dependence. The symptoms of intoxication with *Cannabis* include alterations in mood, perception and judgement, tachycardia, and sometimes psychotic symptoms. The dangers of the synthetic may be greater than those of *Cannabis*, because of greater potency and because psychotomimetic effects with the pure materials are dose-related.^{383, 385, 394}

The hallucinogenic anticholinergics can be dismissed in a few words. Although the drugs are hallucinogenics they are not euphorogenic but dysphoric. The anticholinergics cause confusion, sedation, a delirium with frequently terrifying hallucinations, amnesia, and the usual peripheral autonomic signs of dilated and fixed pupils, tachycardia, flushing etc. The experience is unpleasant, and, even if persons prone to drug dependence try these drugs, they do so only once. The experience is, in the "hippie" jargon, strictly a "downer" (unpleasant feeling). There is no significant amount of abuse of these materials and no illicit traffic. In the USA, there are reports of a number of cases of adolescents smoking "Asthmador", a proprietary preparation containing stramonium that was sold across the counter. As a rule these young people tried the drug once only.