DRUGS

THE LOSING WAR AGAINST 'DESIGNER DRUGS'

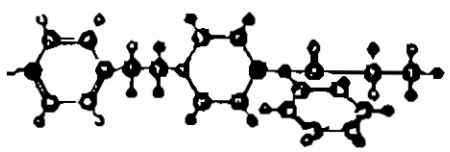
They're mind-bending, dangerous—and entirely legal. They're called designer drugs, and these ultrapotent powders are being concocted in underground labs and snapped up on the streets. Some, such as Persian White, give users a heroin-like high but pack many times the punch. Others, such as the recreational drug Ecstasy, are said to offer the euphoria of LSD but without the hallucinations.

All these drugs are the product of an ingenious scheme that keeps clandestine chemists one step ahead of the law. The underground technicians create a designer drug by subtly varying the chemical structure of an existing illicit drug. Until it is banned by the U.S. Drug Enforcement Administration, the drug is legal to make, sell, and use. When the DEA does outlaw it, the chemists simply design a new—and legal—variation. "[The law] requires the DEA to act after the fact," says Gene R. Haislip, who heads up the agency's efforts to control such drugs. "These guys are always working in front of you."

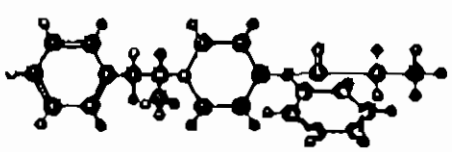
This catch-22 is paying off big for the drug designers. To begin with, the drugs are cheap to make. They require no poppy fields in Turkey or midnight runs from Colombia—just the right lab equipment, a shoebox full of chemicals, and a highly trained pharmacologist who is capable of nothing less than redesigning the structure of complex molecules.

A few thousand dollars' worth of raw materials is enough to cook up millions of high-priced doses. Heroin users in California are paying $40 a dose for addictive variations of the anesthetic fentanyl. Young professionals throughout the country are forking over $20 for a dose of Ecstasy, chemically known as MDMA. "This is a phenomenon unlike anything we have experienced before," says Rene Topalian, an official with the Los Angeles County Health Dept.

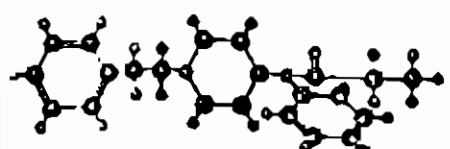
HOW UNDERGROUND CHEMISTS STAY ONE STEP AHEAD OF THE LAW



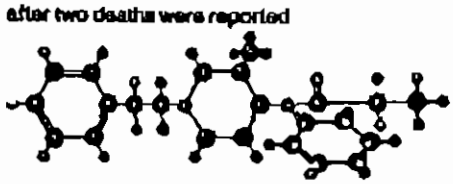
1. This is a molecule of fentanyl, a potent painkiller intended for use in hospitals. It was developed by Belgium's Janssen Pharmaceutica and introduced to the U. S. in 1968. Trade-named Sublimaze, the drug is 100 times as potent as morphine, but its effects last only 30 minutes. It is used in as many as 7 out of every 10 operations



2. In 1979 a new synthetic drug—dubbed China White—showed up on the streets in California. It varied only slightly from the fentanyl molecule, but the small difference was enough to make it perfectly legal. The new formula was also twice as potent. In 1981 the Drug Enforcement Administration banned it after two deaths were reported



3. The underground chemists wasted no time. Before 1981 was over, they rolled out a new—and legal—version of fentanyl that differed by only one atom. Soon after, the DEA banned that as well. The chemists responded by churning out even more new variations with names such as Persian White, Mexican Brown, and Synthetic Heroin



4. So far, the DEA has banned 10 designer versions of fentanyl. But the chemists are still at work. This latest derivative is 30 times more powerful than the original drug. The DEA outlawed it in March, but it is still appearing in the bloodstreams of overdose victims. And drug authorities are certain that it will not be the last deadly designer variation of Sublimaze

The Food & Drug Administration, which regulates the drugs prescribed by physicians, lacks the clout and enforcement staff to deal with hidden drug factories. The harder-nosed DEA is fighting back, but even its arsenal is limited. Last October, Congress streamlined procedures so that the agency could slap a one-year ban on a hazardous drug in just 30 days. But it still can't go after illicit chemists until the drugs are banned. "If we stumble across evidence of a clandestine laboratory," says Haislip, "there's no incentive to follow it up because the DEA has no authority to arrest anyone."

DEADLY CACHET. The drug-variation ploy goes back at least as far as the LSD derivatives of the mid-1960s. But the current designer-drug game is far more sophisticated. "These synthetics are tailor-made," says Gary L. Henderson, a pharmacologist at the University of California at Davis who coined the term "designer drug." "You can control the degree of potency and duration. And there's clever marketing involved. The drugs have names like Mexican Brown, and there's a mystique about them."

That cachet can be deadly. Consider the case of fentanyl, a surgical anesthetic known to doctors as Sublimaze. In 1979 underground chemists in California altered the structure of Sublimaze to produce a potent analog. Pushers sold the new drug under the name China White, a street tag usually given to pure Southeast Asian heroin. Within months, two heroin users had died of overdoses of the new drug.

The DEA quickly placed China White on Schedule I, the list reserved for drugs such as heroin that have no medical use and a high potential for abuse. That move meant that makers or sellers of China White were open to a 15-year prison sentence and a $125,000 fine. But the designers simply produced more versions—10 at last count. The fentanyl-based drugs have caused at least 97 deaths to date, and they continue to kill at the rate of six overdoses each month.

The odds of taking an overdose of a fentanyl analog are great because, although the drug resembles heroin, it is as much as 3,000 times more potent. "You can hold 200 grams of this stuff in your hand," says Robert J. Roberton, chief director of drug programs for California. "That's the equivalent of 200 million doses when cut." Since only two laboratories in the country can detect such small amounts of the drug in the bloodstream, it is likely that many fentanyl-related deaths escape detection.

Those responsible for creating the designer derivatives of fentanyl have also so far, escaped detection. A lot of ex

perts theorize that all of the drugs may be the work of one brilliant pharmacologist. This phantom chemist could whip up a five-year supply of a designer drug in a few months, store all of it in a closet, and quietly dole out wholesale portions to pushers. The operation would be far more sophisticated than the underground labs that churn out such street drugs as amphetamines. "We are talking about a state-of-the-art operation here," says Roberton. "A world-class chemist is probably behind this."

SIDE EFFECTS. Use of fentanyl designer drugs has so far been confined largely to California. That's not the case with MDMA, an amphetamine-like drug that was first patented by E. Merck of Germany in 1914 and resurfaced several years ago as an analog of the illicit drug MDA. Thousands of young professionals and students in at least 20 states are buying MDMA in dance clubs, pizza parlors, and living rooms. "It's getting to the point where Ecstasy is just as easy to obtain as marijuana," says Phillip E. Jordan, a DEA special agent in Dallas.

The DEA last month used its emergency powers to place MDMA on Schedule I after a study by the University of Chicago Medical Center warned that the drug could cause brain damage. The ban immediately drew a backlash from psychologists and psychiatrists who insist that MDMA is a helpful therapeutic tool and who want the drug downgraded to Schedule III, which would facilitate medical research.

"No one knows exactly what MDMA does in the brain," says Dr. George Greer, a Santa Fe (N. M.) psychiatrist who has given the drug to 75 patients. "But it seems to reduce fear response. People can think about things that normally would be too threatening emotionally." All of his subjects, Greer says, reported "more closeness or communication" after taking the drug. Greer has tried Ecstasy himself and insists that it has only minor side effects, including jaw-clenching and fatigue. And he argues that it has a low potential for abuse because its benefits diminish with frequent use.

Nonsense, says Lewis S. Seiden, chief of the University of Chicago researcher who conducted the MDMA trials. Seiden, who is trained in pharmacology and psychology, insists that MDMA belongs on Schedule I. "The claims for the drug are so vague," he says. "They say it 'breaks down barriers'—what the hell does that mean?" Seiden points out that Greer's study was not "double blind," which means it was not designed to prevent inadvertent suggestions by the researcher from affecting test results.

'SERIOUS MISTAKE.' Greer and three colleagues have nonetheless mounted a legal challenge to the DEA's ban on MDMA. They are putting their case before a DEA administrative law judge in Los Angeles. Attorney Richard Cotton, who represents the therapists, says that his clients want MDMA taken off the street. "But [the drug] is not heroin, it's not cocaine," he adds. "To insist on shoehorning it into the same regulatory apparatus is a serious mistake."

Two major drugmakers, Johnson & Johnson's McNeil Pharmaceutical subsidiary and Hoffmann-La Roche Inc., also want MDMA banned but are protesting the speed with which the DEA rushed the drug onto Schedule I. The companies are arguing that the strategy might have a chilling effect on the creation of new medicinal compounds, since it is much more difficult to conduct medical research with Schedule I drugs.

Regardless of the judge's decision on MDMA, some people have already made up their minds about designer drugs. Florida, the nation's port for illegal cocaine, doesn't yet have a big problem with the derivatives. Nonetheless, the legislature last month granted the state attorney general powers to put potentially hazardous drugs on a controlled substances list in as little as 24 hours.

Congress may soon take broader action as well. Both houses are considering bills that would mandate study of the designer drug problem. That could lead to new legislation providing harsh penalties for those who create analogs of controlled drugs with the intention of distributing them illegally. Until then, however, drug designers will have little reason to stop creating new substances that may kill. After all, they aren't breaking any laws.

By Roger Schulman with Margaret S. Bin in New York, and Bureau reports

HERE COMES PRESCRIPTION POT

While clandestine chemists are confounding the law by creating unregulated versions of illegal drugs, one already banned drug is coming in off the street. On June 6 the Food & Drug Administration licensed a tiny drug company to manufacture the key ingredient of marijuana: a chemical known as THC, which can combat the nausea associated with cancer chemotherapy. Other studies under way indicate that it may also prove to be an important treatment for several other diseases, including glaucoma and multiple sclerosis.

The FDA decision is an important victory for groups that have been trying to persuade the government to legalize certain medical uses of the drug. Despite studies proving that marijuana is a great help in eliminating the side effects of chemotherapy, the government has not legitimized its use. For the past several years, it has simply looked the other way if cancer patients smoked marijuana. And although a glaucoma patient won a court decision granting him the right to use marijuana to relieve the pressure in his eyes, the government did not make the substance available to other patients suffering from that eye disease.

TAKE A HIT. Those who want to legalize marijuana for medical purposes are not planning to stop with THC, short for delta-9-tetrahydrocannabinol. The National Organization for the Reform of Marijuana Laws hopes to get the whole cigarette approved for nausea. "Marijuana itself is safer and more effective than a THC pill," says Kevin Zeese, NORML's national director. A medical researcher who has compared the effects of marijuana and THC on 200 cancer patients agrees. "Smoking is better than THC," says Dr. J. Thomas Ungerleider, professor of psychiatry at UCLA's Center for Health Sciences. "You take a hit, you get better." The THC pill, however, may require six hours to take effect.

Congress is also getting into the act. Legislation to legalize marijuana cigarettes as medicine was introduced on Apr. 25 by Representative Stewart B. McKinney (R-Conn.). Even if that bill is defeated, the FDA approval of THC promises some relief for the 75,000 patients who are currently undergoing chemotherapy. And it could become a significant product for its manufacturer, Unimed Inc., a 12-employee research company in Somerville, N. J. The company, which is calling the marijuana derivative Marinol, plans to have it in the pharmacies by August.

But some drug experts are already worried that the FDA's licensing of THC will simply add to the problems on the street. Robert C. Randall, the glaucoma patient who took the government to court, warns that THC "is more psychoactive than marijuana." And Randall, who now heads a Washington group called the Alliance for Cannabis Therapeutics, believes legal THC will soon appear on the illicit market.

By Reginald Rhein Jr. in Washington

Dear Editor, July 1,1985

Your June 24th issue discussed MDMA, a chemotherapeutic adjunct to psychotherapy Also mentioned was Unimed, a publically traded company that markets THC for the treatment of nausea in chemotherapy As MDMA becomes a Schedule 1 drug, the only appropriate response by those interested in its use is to do the FDA research to justify its use as a medicine. Therefore, a venture capital stock offering is being planned to raise the $10,000,000 for research required prior to an FDA decision regarding its rescheduling.

The company, tentitively named Orphan Pharmaceuticals, will raise funds for research for both patentable and unpatentable compounds for use as adjuncts to psychotherapy. It is my hope that the business community will critique and advise in the development of the company so that it can become more than a dream.

Also, there was a major misstatement of fact concerning the research cited by the DEA to suggest that MDMA causes brain damage. The U. of Chicago study injected MDA, not MDMA as the article stated, in rats. Several drugs currently approved by the FDA for daily use in children cause similar brain damage when injected in rats, and the medical community has decided that the rat brain and the human brain act significantly different to make the rat studies largely irrelevant. Also, a recently completed study by Intox Labs, Redfield Arkansas, administering MDMA orally to rats demonstrated that even a human equivalent dose of 25 grams caused no brain damage in rats.

Sincerely, Rick Doblin