Vermont Legislative Research Shop

Ecstasy (MDMA)

General Information

The drug MDMA (ecstasy) was first synthesized as an appetite suppressant in 1912 by a German pharmaceutical company but because of its side effects it was never marketed. Authorities relatively ignored MDMA until the late 1970’s when it began to reemerge in Europe. Illicit use of MDMA did not become popular in the US until the late 1980’s and early 1990’s (Drug Enforcement Administration 2000). While MDMA abuse currently is not as widespread as other drugs its use has increased 500% in the last five years. The drug is typically taken orally, usually in tablet or powder form, and its effects last from four to six hours. Users report feeling relaxed, positive, empathetic, and extremely happy. It is also used as an aid to suppress hunger and sleep. To date no substantial reports exist proving that it is physically or mentally addictive though immediate effects include hallucinations, nausea, teeth and muscle cramping, chills, sweats, increase in body heat and blurred vision. Reported after effects include sleep problems, high blood pressure, anxiety, and paranoia.

Several recent studies on primates show that heavy exposure to MDMA can deplete serotonin neurons, which are thought to play a role in regulating mood, memory, sleep, and appetite. Research on the functional consequences of MDMA-induced damage of serotonin producing neurons in humans is at an early stage, and the scientists who conducted the recent studies cannot say definitively that the harm to serotonin neurons account for the memory and mood impairments found in chronic users (US Dept. of Justice 2001). However, the study found that compared to nonusers, heavy MDMA users had significant impairments in visual and verbal memory. The National Institute on Drug Abuse reported that fatalities have been linked to dehydration, hypothermia, cardiac arrest, and kidney failure arising from the body’s inability to thermally regulate itself. While death is rare, the risks are heightened in settings in which the users dance for extended periods of time in hot and crowded conditions, where body temperatures can rise as high as 108 degrees. The rare deaths that are associated with the drug MDMA are most often a result of other additives put into the ecstasy pill. An ecstasy additive is being blamed for numerous deaths in Florida and Chicago. The ecstasy pills being blamed for the six deaths in Central Florida and three in Chicago contained PMA (paramethoxyamphetamine), which has been described as "cooking a users brain like a 10-minute egg. It can burn out a person’s central nervous system by raising body temperatures as high as 108 degrees" (Brassfield 2000). These ecstasy pills containing PMA have been traced back to illegal labs in Germany and Denmark.

Use Statistics

Recent media coverage has closely associated MDMA with clubs, all night raves, college campuses, and rock concerts. MDMA is most often used by young adults and adolescents. According to the National Institute of Drug Abuse, overall teen drug use has remained steady in 1999-2000, while ecstasy use has increased dramatically among 10th and 12th graders. Increased use of MDMA has been reported in areas such as Boston, Seattle, Atlanta, Chicago, and Miami (Focus Adolescent Services 2000). A recent survey reported that 8% of high school seniors had tried MDMA, up from 5.8% the year before. Authorities point out that the drug MDMA
is marketed to youths because tablets are usually stamped with designs such as cartoon characters, and popular youth product icons. Unlike users of certain other drugs, users of MDMA rarely commit crimes to support a habit. Over 85% of MDMA offenders have little or no criminal history, in contrast to 31% of crack and heroin offenders with no criminal records (Murphy 2001).

Legal Status

MDMA is considered under federal law a schedule 1 drug, alongside other drugs such as cocaine, heroin, and speed (Stone 2001). Possession of MDMA is, and long has been, a crime under federal law, though several states have yet to put MDMA on their list of illegal drugs. Maryland, in response to the growing ecstasy problem has created the DEWS (Maryland Drug Early Warning System), which has a goal to reduce the use and availability of ecstasy. The Maryland system has four goals, these include inform and educate the public, intensify and focus law enforcement efforts, ensure diagnosis and treatment of ecstasy users, and monitor ecstasy use in Maryland (Governor’s Office of Crime Control & Prevention 2001). Illinois has reacted to the rising ecstasy use by attempting to elevate the penalty for the sale of more than 200 grams of MDMA, as a class X felony, which carries a mandatory minimum sentence of six years (Coen 2000). Other states such as Texas have taken more drastic steps to penalize ecstasy possession. In Texas the possession of less than 1 gram carries a mandatory minimum of 6 months-2 years in jail with a maximum $10,000 fine (The Center for cognitive Liberty & Ethics 2001).

Possible Ecstasy Benefits & Education

There are several nonprofit organizations that advocate education rather than harsh penalties for MDMA use. Dancesafe is one organization that offers pill testing kits and on the spot testing at clubs and raves. Their philosophy has two fundamental operating principals, harm reduction and popular education which enables peer based programs to reduce drug abuse and empower young people to make healthy, informed lifestyle choices (Dancesafe 2001). Dancesafe argues that the "just say no" campaign is not working for teenagers. They also point out that attempting to scare youth with exaggerated dangers does more harm than good. Some doctors argue that MDMA has several positive medical benefits. Doctor Julie Holland cites several supervised psychiatric and medical uses of MDMA, which include: battling depression, post traumatic stress disorder, eating disorders, marriage counseling, enhancing hypnotic sessions, and group therapy.

Works Cited


Dancesafe.org. 2001. (http://www.dancesafe.org)


The Center for cognitive liberty & ethics, 2001 (http://www.cognitiveliberty.org/lawlibrary/mdmainindex.htm)


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