The New "Dope" On Dope

Marijuana usage has significantly increased in recent years. In order to better understand this issue, we have compiled current research findings on the topic of marijuana. Each fact is followed by the source and date of the research.

General Marijuana Information

Marijuana is dried leaves and flowers from the Asian Indian Hemp plant called Cannabis sativa. Most ordinary marijuana has an average of 3% THC. Sinsemilla, which is made from just buds of unpollinated female marijuana plants, has an average THC concentration of 8%, although it can be as high as 24%. Hashish, a sticky resin obtained from the female plant flowers, has an average of 2% to 8% THC and can contain as much as 20% THC. Hash oil, a tar-like liquid distilled from hashish, generally consists of between 15% and 50% THC, but can have as much as 70% THC. Approximately 25% of the pot consumed in the U.S. is homegrown (NIDA Notes, 1996).

More than 50 million Americans have tried marijuana, which is the most widely used of all illicit drugs. Approximately 13 million Americans regularly use marijuana (Harvard Medical School, 1988).

Newer, more potent, and more dangerous forms of marijuana include cocaine-laced "woolies" and crack-packed "coolies" (National Conference on Marijuana, 1995).

A key indicator of the increased potency of marijuana is the number of persons seeking hospital emergency room treatment for marijuana effects. Emergencies jumped by 86% between 1990 and 1993 (National Conference on Marijuana, 1995).

Slicing open cigars and replacing the tobacco with marijuana results in a marijuana cigar called a "blunt" (NIDA Notes, 1996).

There is a cigarette which produces the odor of marijuana. Manufactured by Honeyrose Products, it is imported into the U.S. for sale under the brand name "Ginseng Herbal Cigarettes."

Since hemp production in the U.S. could not compete economically with plant fibers produced in other countries, by 1933 (five years before the Hemp Taxation Act) production of true hemp in the U.S. had diminished to less than 200 acres. Hemp fiber is not needed by the textile industry; cotton is cheaper and more useful (Drug Watch International, 1994).

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Marijuana and the Body

**Brain**

One of the adverse effects of smoking today's potent marijuana is that some subtle but important memory deficits continue for at least six weeks after one's last puff of pot (Georgetown University School of Medicine, 1990).

THC adversely affects the brain's hippocampus, which is crucial for learning, memory, and the integration of sensory experiences with emotion and motivation (NIDA Notes, 1994).

The regional distribution of alpha activity in the brain of marijuana users is different from the expected alpha topography that characterizes the population at large (L.S.U. College of Medicine, 1988).

Anandamide is an endogenous cannabinoid that binds with marijuana receptors just as THC does. It is naturally present in the brain, and is synthesized and metabolized in the brain (Dr. Billy Martin, Medical College of Virginia, 1995).

**Lungs**

Exposure to marijuana smoke is associated with the presentation of lung cancer, particularly in younger patients. Although this association can be found in older patients as well, it is more striking given the infrequent presentation of neoplasia (any new and abnormal growth) and the relatively brief period of exposure to other carcinogens in younger patients (University of Miami School of Medicine, 1994).

The daily use of one to three marijuana joints appears to produce approximately the same damage and potential cancer risk as smoking five times as many cigarettes. It also deposits four times more tar in the throat and lungs and increases the carbon monoxide levels in the blood four to five times (NIDA Notes, 1988).

**Stomach/Liver**

Marijuana strongly inhibits nausea. So, a person with THC stored in his body can consume a large quantity of alcohol without getting sick. A consequence of this is that death due to alcohol overdose has escalated. Overdoses used to be very rare, because the body normally protects itself by vomiting (Drug Awareness Information Newsletter, 1989).

**Immune System**

One type of immune system cell that has been shown by researchers to be particularly sensitive to THC exposure is the macrophage or scavenger cell, which clears the body of viruses, bacteria, and particles that are inhaled or ingested (Dr. Guy Cabral, Medical College of Virginia, 1995).
Heavy marijuana users consistently report higher negative mood scores and lower positive mood scores (Harvard Medical School, 1989).

Affect

Poor performance on perceptual-motor function was found after twelve weeks of abstinence from marijuana (Brown University, 1991).

Perceptual/Motor Skills

Chronic THC exposure negatively affects one's ability to estimate time (L.S.U. Medical Center, 1993).

Pilots in flight simulators showed impairment 24 hours after smoking marijuana (carry-over effect). The most dangerous aspect of carry over effects of marijuana is that the user does not believe he is impaired despite evidence to the contrary (Substance Abuse Report, 1991).

Developmental Stages in Drug Use

The first stage is the use of alcohol or cigarettes; the next stage is marijuana use; and the third stage is the use of other illicit drugs. Young people are unlikely to try marijuana without first having experimented with an alcoholic beverage and/or cigarettes. Very few try other drugs without first trying marijuana. The earlier a youth begins the use of legal drugs, the higher probability the youth will progress to experimentation with illegal drugs. Intensity of use with a drug at one stage is related to progression to use of a drug at a higher stage (Dr. Denise Kandel, National Conference on Marijuana, 1995).

Marijuana Brownies

* Peak effects after consumption of brownies containing THC occurs 2.5 to 3.5 hours after ingestion (Addiction Research Center, 1988).

* Oral ingestion of marijuana in a brownie containing the equivalent of one cigarette was shown to result in positive urine tests (National Institute on Drug Abuse, 1990).

Drug Testing

* Screening for marijuana is possible today using either hair, sweat, urine, or saliva samples. (Dr. Richard Dembo, University of Southern Florida, National Conference on Marijuana, 1995).

* The detection time for THC in saliva is similar to that for blood, 4 to 12 hours after marijuana use. Sweat testing can detect use over a period of 1 to 2 weeks. Hair testing could possibly reveal historical THC use dating back months to years (dependent upon the length of the individual's hair) (Dr. Ed Cone, NIDA Chemistry and Drug Metabolism Section, 1995).

* Passive inhalation of marijuana smoke occurring in social situations is unlikely to result in levels that could produce noticeable pharmacological effects and positive results for cannabinoids in urinalysis (National Institute on Drug Abuse, 1990).
The Effects of Marijuana on Infant Development

Prenatal marijuana exposure created significant negative effects on the performance of 3 year old children on the Stanford-Binet Intelligence Scale (University of Pittsburgh School of Medicine, 1994).

Some of the neonatal effects of smoking marijuana during pregnancy includes shorter lengths at birth, lower birth weights, and birth defects which include neurobehavioral dysfunction. A higher incidence of spontaneous abortions and SIDS is also reported (Boston University School of Medicine, 1990).

Because the placenta has a high fat content and THC is stored in fat cells, marijuana may cause some miscarriages (Dr. David Ohlms, 1991).

Cries of infants of marijuana users are significantly different than non-marijuana users, suggesting heavy marijuana use affects the neurophysical integrity of an infant (Brown University, 1989).

Children and Adolescents
Children who smoke pot are 85 times more likely to use cocaine (U.S. News and World Report, 1994).

Less family involvement and greater drug using peers leads to greater marijuana use among younger adolescents (Emory University School of Public Health, 1994).

Marijuana and Behavior
Regular marijuana use may lead to lower achievement, increased tolerance of deviance and deviant behavior, and greater rebelliousness (Mount Sinai School of Medicine, 1989).

Marijuana use decreases verbal interaction time in small groups, and increases interpersonal distance (John Hopkins University, 1989).