

## **Side Affects of Marijuana**

### **USE OF MARIJUANA AND OTHER ILLICIT DRUGS MAY PLAY ROLE IN INCREASE OF GENITAL ABNORMALITIES AND INFERTILE IN MALES**

A report by Auger et al., *New England Journal of Medicine*, 332;281-285, 1995, shows that in some countries, during the past 20 years, there was a decline in the quality of sperm of fertile men which correlated with an increase in genital abnormalities such as cancer and cryptorchidism.. This effect was independent of the age of the men. In the same issue of the *New England Journal of Medicine*, Howards, page 312, pointed out that male infertility is often related to lifestyle factors such as the use of marijuana, anabolic steroids, and cocaine.

**COMMENTARY:** While associations such as these do not prove cause and effect, it is of interest that illicit drug use could be a major factor in the decline of fertility among men over the past two decades. The authors of the original paper admit to not having another explanation and acknowledge that environmental or lifestyle factors could be playing a major role.

### **LOWER IQ IN TODDLERS LINKED TO PRENATAL EXPOSURE TO MARIJUANA**

Researcher (Day et al, *Neurotoxicology and Teratology* 16;169-175, 1994), found “significant negative effects of prenatal marijuana exposure on the performance” of both African American and Caucasian children in standard intelligence tests. This negative effect on the child was related to marijuana exposure during the first and second trimester of pregnancy. On average, children exposed prenatally to marijuana will have a lower IQ compared to children who are not exposed, even when the effects of various environmental factors are adjusted for.

**COMMENTARY:** The children involved in this study were tracked from birth to three years. The study, which included an equal number of white and African-American women, most of whom were single and of lower socio-economic status, suggesting that marijuana, not race or other prenatal factors, accounts for these changes.

### **SLEEPING PROBLEMS FOUND IN TODDLERS EXPOSED TO MARIJUANA**

Prenatal exposure to marijuana showed impairment in sleep pattern and more awake time after sleep onset in exposed children, at age three, compared to control children (Dahl and colleagues in the journal, *Archives of Pediatric and Adolescent Medicine*, 149;145-150, 1995). Sleep deprivation is frequently associated with emotional and behavioural difficulties and reduced attention span, symptoms which could be associated with other psychiatric problems as well. Marijuana directly impacts the part of the brain that regulates sleep and arousal, causing concern that prenatal use of marijuana could affect the development of that part of the brain, resulting in permanent changes in sleeping patterns.

**COMMENTARY:** While studies of prenatal marijuana exposure and long-term follow-up of children so exposed are rare, the weight of the evidence suggests that this exposure is not without adverse consequences for the child.

## **SUBSTANCE USE DURING VIETNAM ASSOCIATED WITH NINE TIMES HIGHER MORTALITY RATE THAN FOR CIVILIANS**

Price et al., from Washington University School of Medicine, presented long term follow-up studies on a group of Vietnam veterans, now in their mid-40's, compared to civilian controls who did not serve in Vietnam. Veterans who tested positive for drugs upon their return from Southeast Asia, had a nine times higher death rate than that of the civilian controls. The death rate for veterans who tested negative for drugs was still four times higher. The authors concluded that substance use in the Vietnam experience played a key role in the increased mortality.

This is a culmination of a landmark study started in 1972 and consists of 900 soldiers who had come home from Vietnam the year before. All had been tested for drug use. Three year follow-up interviews were conducted in 1974 when civilian controls were also added to the sample. The current study tracks the original participants..

Available data in the present study show that a sizeable percentage of deceased veterans who tested positive for drug died of drug and/or alcohol related causes according to death certificates. Of the deceased drug positive veterans 37 percent had alcohol or drug related causes of death, and 14 percent were found to be homicide victims.

While these men tested positive in one single drug test, the authors noted that it was interesting that this one test seemed to have predicted both the high mortality and a high risk of certain causes of death. The authors noted that drug use was not the only statistically significant predictor of premature death, since veterans who tested negative for drugs still had a four times higher death rate than men of similar age and background who did not go to Vietnam.

**COMMENTARY:** This important study should carry major alarm messages for those who advocate casual drug use and minimise its impact on the medical and psychiatric health of the population.

## **TOXIC PSYCHOSIS PRODUCED BY MARIJUANA SMOKING WHILE ON ANTABUSE**

A 36-year-old man who was on Antabuse for alcohol treatment smoked marijuana as a substitute for alcohol. He immediately developed an acute toxic psychosis with disorientation, lack reality, and a manic psychosis. This lasted for 48 hours. The manufacture of Antabuse have had one previous report of this type of drug interaction (Lacoursiere et al., *American Journal of Psychiatry*, 140;242-244, 1983).

**COMMENTARY:** People attesting to a relative safety of marijuana forget that there are interactions between many drugs that may lead to adverse reactions. This example of an acute toxic psychosis in someone under treatment for alcohol abuse emphasizes the potential for marijuana interactions with prescription and non-prescription substances, which could be of great danger to the patient, and of course would be unanticipated.

Drug Watch, Oregon, USA., *Marijuana Research Review*, Comments by William M. Bennett, M.D., Professor of Medicine, Division of Nephrology, Clinical Pharmacology and Hypertension at Oregon Health Sciences University, Portland, Oregon.