Marijuana Use Trends and Psychiatric Disorders

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**History**

The Hemp Plant, Cannabis sativa, is among the oldest known to humankind. Evidence for its use as a source of fiber for clothing, rope and in the production of parchments can be traced to Central Asia 12,000 years ago. The word “canvas” is derived from cannabis. Throughout human history extracts of the cannabis plant have been used as medicine for a variety of conditions such as muscle spasm, nausea and nervous disorders. Its introduction into Western medicine is attributed to an English Army Surgeon, William O’Shaughnessy who used cannabis extracts while in India during his appointment as Physician and Director of Telegraphy with the East India Company in 1844. Cannabis plants accompanied the settlers who arrived at Jamestown in 1607. During colonial times, and continuing for the next 300 years, extracts of the cannabis plant had been used by physicians and the public for treatment of a variety of musculoskeletal, digestive and nervous conditions. Various nostrums including extracts of cannabis were freely available to the public unregulated and widely used in popular cures.

The first effort to control the sale of cannabis products, the Marijuana Tax Act, became federal law in 1937 over the objections of the American Medical Association. Over the remainder of the century increasing regulation by federal and state governments culminated in inclusion of cannabis as a schedule I drug with high abuse potential and no accepted medical use by the Controlled Substances Act of 1970. Despite this, very limited numbers of individuals have received medical marijuana as part of a tightly controlled compassionate use program administered by the National Institute of Drug Abuse.

**Recent Use Trends**

Each year researchers from the Department of Social Sciences at the University of Michigan survey about 50,000 secondary students about their use of alcohol and illicit drugs. In 2012, about half (49 percent) of high school seniors reported the use of an illicit drug. For 10th and 8th graders, the figure was 37 percent and 15 percent. In the vast majority of cases the drug reported was marijuana. Strikingly, about 1 in 15 12th graders indicated that they used marijuana on a daily basis last year. Among adults in America, despite a leveling off of the prevalence of illicit drug use in general, about 7 percent of the US population use marijuana at least monthly, a figure that has grown each year out of the past five. Among high school age children, marijuana use in the past month exceeds use of tobacco products.

After alcohol and tobacco, marijuana is regularly reported to have the highest rates of dependence and abuse in national surveys. In 2011, 4.2 million individuals qualified under DSM-IV TR for a diagnosis of cannabis abuse or dependence. Individuals with diagnosed mental disorders use marijuana at rates that are seven times those who do not have a mental disorder. Among patients in treatment for psychiatric disorders there is a tenfold increase in marijuana use disorders as compared to the general population. These statistics underline the important
observation that patients in psychiatric treatment are more likely to use, tend to use more and are more likely to become dependent on this widely available substance.

Public Attitudes and Legislative Changes

Public attitudes and views of the dangerousness of cannabis are changing. This has had an important effect on public policy and legislation related to the use of marijuana. Over the past decade about half of our states have either decriminalized or greatly reduced the penalties for possession and use of small amounts of cannabis products. Two states, Colorado and Washington, have passed legislation providing for legalization for recreational purposes, and in 21 states where it has been made available for “medical purposes,” use appears to be rapidly expanding fueled by robust cottage industries in provision of numbers of products that include cannabis. Today there are a few countries that derive the majority of their tax revenue from sales of legal cannabis.

Paradoxically, arrests for possession and sale of marijuana have trended upwards recently with an average of 100 individuals detained per hour nationally as reported by FBI statistics. This is occurring despite the announcement by the U.S. Department of Justice that they would not prosecute those using cannabis within the legal structure of the laws of those states. Canada has recently approved an expansion in a regulated system of marijuana culture that has an estimated revenue potential of $1.3 billion according to executives of Tweed, a corporate producer of medical marijuana. It is estimated that over the next decade there will be 500,000 users of the product among our northern neighbors.

Legal Status in North Carolina

Here in North Carolina where use of small amounts of marijuana remains a class 3 misdemeanor, a bill to downgrade this to a summary offense was defeated in the past legislative session. The ACLU has recently reported a dramatic disparity in the prosecution of users of marijuana. In North Carolina 50 percent of those prosecuted have been African American. The future of the legal status of this curious plant is now under intense scrutiny. Opinions on public policy range from support for full legalization to continue restriction and control.

In North Carolina House Bill 84 “Enact Medical Cannabis Act” received a rare negative report and is dead for the 2013-2014 session. News reports indicated that legislators were being “harassed” by constituents almost all of whom were in favor of passage. Groups advocating availability of medical marijuana have been formed and are growing in our state. The listing of marijuana as a schedule I drug under the Controlled Substances Act defining it as a substance with no currently accepted medical use and a high potential for abuse is a source of increasing controversy.

Cannabis as Medications
Since the discovery that THC is the active ingredient in smoked marijuana there has been research interest at both a clinical and basic science level in the use of cannabis as a potential therapeutic agent. Discovery and elaboration of the endogenous endocannabinoid system and its role in modulating stress in health and disease promises to provide insights into therapeutic applications for a variety of problems such as treatment of pain, obesity, muscle spasms and seizures. Additionally, growing information is pointing to deleterious effects of cannabinoids. Multiple studies have now demonstrated increased risk for development of schizophrenic-like psychosis among youth who are regular users of smoked cannabis.

The accumulated body of evidence relating to the positive and negative health effects of marijuana has great relevance for the current debate about liberalizing availability of cannabis products. The NCPA Addictions Committee will present clinical information for our members.